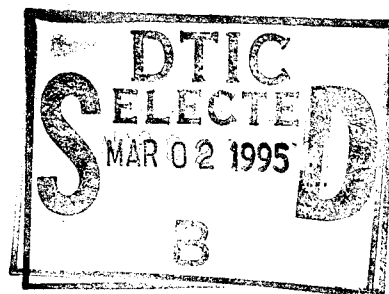




FINAL EXPANDED SITE INSPECTION AMMUNITION STORAGE AREA

**ANNISTON ARMY DEPOT
ANNISTON, ALABAMA**



Contract Number
DAAA15-90-D-0013

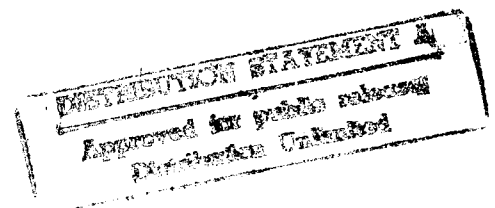
Task Order Number
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Document Number
THA-35G30600-B6-1910

NOVEMBER 1994

JE JACOBS ENGINEERING GROUP INC.

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REPORT DOCUMENTATION PAGE

Form Approved
GMS No. 0704-0182

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0182), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE November 15, 1994		3. REPORT TYPE AND DATES COVERED Final (9/92 to 11/94)	
4. TITLE AND SUBTITLE Final Expanded Site Inspection, Ammunition Storage Area, Anniston Army Depot, Anniston, Alabama				5. FUNDING NUMBERS Contract No. DAAA15-90-D-0013 Task Order No. 6	
6. AUTHOR(S) Suomela, Kirt D.; Highsmith, Ronald L.; Rapuano, Kenneth F.; Kirschner, Bruce					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Jacobs Engineering Group Inc. 1212 New York Ave, N.W., Suite 1050 Washington, DC 20005				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Environmental Center Aberdeen Proving Ground, Maryland 21010				10. SPONSORING / MONITORING AGENCY REPORT NUMBER SFIM-AEC-IR-CR-94116	
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) An Expanded Site Inspection (ESI) was conducted at the Anniston Army Depot (ANAD) Ammunition Storage Area (ASA). The objective of this ESI was to gather the information and data necessary to determine whether there is sufficient evidence of any release of contamination that would require additional investigation. The ASA contains 1,300 ammunition storage magazines and an ammunition maintenance workshop complex which includes buildings for maintenance, demilitarization, and inspection of all types of ammunition and their components. Fifteen Solid Waste Management Units (SWMUs) were the focus of the ESI, of which 11 were recommend for further investigation. The work included a review of historical records, field investigations, laboratory analyses, data interpretation, and report preparation. Contamination from volatile organic compounds and semi volatile organic compounds is not a major problem at the ASA. Arsenic, beryllium, cadmium, chromium, lead, mercury, nickel, silver, vanadium, zinc, explosives, and total petroleum hydrocarbons were detected above control screening values levels in one or more of the media sampled. Nitrate/nitrite and total organic carbon were also detected above control screening values in samples of groundwater, soil, and sediment from a number of SWMUs.					
14. SUBJECT TERMS Site Inspection, SWMUs, control screening values, contamination				15. NUMBER OF PAGES 575	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT		

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EXECUTIVE SUMMARY

This document presents the results of the Expanded Site Inspection (ESI) conducted at the Anniston Army Depot (ANAD) Ammunition Storage Area (ASA). The objective of this ESI was to gather the information and data necessary to determine whether there is sufficient evidence of any release of contamination that would require additional investigation.

The 15,200 acres comprising the ANAD are located in northeastern Alabama in Calhoun County. The ASA, which occupies over 90% of the site, contains 1,300 ammunition storage magazines and an ammunition maintenance workshop complex which includes buildings for maintenance, demilitarization, and inspection of all types of ammunition and their components.

Fifteen Solid Waste Management Units (SWMUs) have been identified in the ASA, and are the focus of this report. Five SWMUs are currently active. Permits for four of these SWMUs have been applied for as required by the Resource Conservation and Recovery Act (RCRA) for current waste management. The ESI was concerned with identifying potential contamination from past activities.

The ESI was guided by the work plan written by Jacobs Engineering Group Inc. (Jacobs, 1991). The work included a review of historical records, field investigations, laboratory analyses, data interpretation, and report preparation. Field work included geophysical surveys; soil borings; well installations; and collection of groundwater, soil, sediment, and surface water samples. Laboratory analyses of samples were selected based on a review of historical records and potential contaminants were identified at each of the SWMUs from previous site investigations. All field activities, sample management, laboratory analyses and data management activities were conducted in accordance with an approved Health and Safety Plan, and an approved Quality Assurance Program Plan.

Analytical data for each medium were evaluated to select samples believed to be representative of the natural background. Samples evaluated were collected at locations within the ASA expected to be free of contamination.



Contamination from volatile organic compounds and semi-volatile organic compounds is not a problem at the ASA. Arsenic, beryllium, cadmium, chromium, lead, mercury, nickel, silver, vanadium, zinc, explosives, and total petroleum hydrocarbons were detected above control screening values in one or more of the media sampled. Nitrate/nitrite and total organic carbon were also detected above control screening values in samples of groundwater, soil, and sediment from a number of SWMUs.

Analyses of groundwater and surface water samples collected indicate the presence of a number of elements which occur naturally in soil, sediment, and rocks in the area. Specifically, these are aluminum, barium, calcium, cobalt, copper, iron, magnesium, manganese, molybdenum, potassium, and sodium. However, where the reported concentrations of these elements in soil, sediment, groundwater, and surface water samples are above control screening values, they are considered potential contaminants of concern.

High concentrations of explosives are reported to be present in the SWMU #11 leaching bed. Analysis of samples collected from the leaching bed by ANAD safety personnel prior to capping the bed revealed explosives concentrations ranging from 40-80%. However, documentation of this analysis cannot be located and may no longer exist (personal communication, ANAD-RMD).

The recommendations concerning the 15 ESI SWMUs are based on the results of the field investigations, laboratory analysis of environmental samples, and analyses presented in this report. As a result of these efforts, further investigation to confirm and evaluate potential contamination is recommended at the following 11 SWMUs:

- SWMU #5 — Sinkhole
- SWMU #8 — Acid Disposal Pit
- SWMU #10 — TNT Washout Facility
- SWMU #11 — TNT Washout Facility Leaching Beds
- SWMU #14 — Laundry Waste Leaching Facility
- SWMU #15 — Propellant Disposal Facility
- SWMU #18 — Old Sewage Treatment Plant
- SWMU #26 — North TNT Burial Pit



Anniston Army Depot, Alabama

Expanded Site Inspection of the Ammunition Storage Area

- SWMU #27 — South TNT Burial Pit
- SWMU #35 — Deactivation Furnace
- SWMU #37 — Vehicle Wash Rack.

No further action is recommended at the following four SWMUs:

- SWMU #16 — Burning Ground (subject to future RCRA Corrective Action)
- SWMU #17 — Demolition Pit (subject to future RCRA Corrective Action)
- SWMU #34 — Chemical Storage Igloos
- SWMU #36 — Drill and Transfer System Site.

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Jacobs Engineering Group Inc.
Washington Operations

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ACRONYM LIST

ANAD	Anniston Army Depot
ASA	Ammunition Storage Area
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRL	Certified Reporting Limit
EM	Electromagnetic Method
ESI	Expanded Site Inspection
GPR	Ground-Penetrating Radar
IRDMIS	Installation Restoration Data Management Information System
NGVD	National Geodetic Vertical Datum
PCBs	Polychlorinated Biphenyls
QA	Quality Assurance
QAPP	Quality Assurance Program Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
SIA	Southeast Industrial Area
SARA	Superfund Amendments and Reauthorization Act
STP	Sewage Treatment Plant
SVOC	Semivolatile organic compound
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TCLP	Toxicity characteristic leaching procedure
TDS	Total dissolved solids
TPHCs	Total Petroleum Hydrocarbons
TOC	Total Organic Carbon
USACE	U.S. Army Corps of Engineers
USAEC	U.S. Army Environmental Center (formerly USATHAMA)
USATHAMA	U.S. Army Toxic and Hazardous Material Agency
UXO	Unexploded ordnance
VOC	Volatile organic compound
µg/l	Micrograms per liter
µg/g	Micrograms per gram



SECTION 1

INTRODUCTION

This report presents results from the Expanded Site Inspection (ESI) conducted by Jacobs Engineering Group Inc., of the Ammunition Storage Area (ASA) at the Anniston Army Depot (ANAD) located near Anniston, Alabama. The report has been prepared in accordance with Contract No. DAAA15-90-D-0013 for the U.S. Army Environmental Center (AEC). The report presents the scope of the ESI, describes data collection activities, and presents results and conclusions of the work that was conducted in accordance with the ESI Work Plan (Jacobs 1991) and the Field Sampling and Analysis Plan contained therein.

1.1 PURPOSE

The purpose of the ESI was to determine whether there is sufficient evidence of a release at any Solid Waste Management Unit (SWMU) to require additional investigation. The objective of the ESI was to narrow data gaps and facilitate remedial planning (including a determination of the extent of remedial investigations required) should the need for additional action be indicated. U.S. Environmental Protection Agency Region IV has determined that a Hazard Ranking System Scoring as a part of the ESI is not required.

1.2 SCOPE

The ESI was directed at investigating 15 SWMUs within the ASA.¹ The work involved a records search, field investigations, laboratory analysis, data interpretation, and report preparation. The field work included soil boring and well installation, geophysical surveys, and sampling of groundwater, soil, sediment, and surface water for chemical analysis. Field work and analytical activities were conducted in accordance with the approved Health and Safety Plan and the Quality Assurance Program Plan prepared for investigations at ANAD. Samples were delivered to PACE Laboratories, Inc. for chemical analysis. The data were entered into AEC's Installation Restoration Data Management Information System (IRDMIS).

¹Two of the 15 SWMUs (#'s 18 and 37) are outside the ASA boundary, but are included within the scope of the ESI. References to the ASA throughout this ESI include these SWMUs.



Intrusive investigation of some SWMUs (#'s 10, 11, 14, 16, and 17) was restricted because of the suspected presence of explosive materials. Investigations at these SWMUs were limited to records reviews and sampling around the perimeter to identify evidence of contaminant release. Because there were no suspected releases from SWMUs #34 and #36, and because of the extreme toxic chemical hazard at SWMU #34, investigations at these two sites were limited to record searches.

Several SWMUs are currently in use (#'s 16, 17, 18, 34, and 37). The ESI focus was on potential contaminant releases within or from these SWMUs under conditions existing at the time of the investigation.

1.3 ORGANIZATION

The ESI report format is based on the EPA document entitled, "Expanded Site Inspection, Transitional Guidance for Fiscal Year 1988" (EPA 1987). The report is organized by major sections that include an Introduction; a discussion of the Site Background; a Site Physical Characterization; a description of the ESI Field Investigations; a presentation of Investigations and Results; a discussion of the Nature and Extent of Contamination; a presentation of Community Relations Activities; a presentation of Conclusions and Recommendations; and a list of References. Appendices contain detailed supporting information. An Executive Summary appears at the beginning of this report.

SECTION 2

SITE BACKGROUND

The Anniston Army Depot (ANAD) Ammunition Storage (ASA) has been the subject of a number of previous investigations. The information presented in this section was compiled from previous studies and investigations conducted at or near the site. The discussion includes a description of the study area, information on the demography and land use of the region, and a historical review of ANAD operations. A description of Solid Waste Management Units (SWMUs) and an overview of previous investigations are included.

2.1 SITE LOCATION AND DESCRIPTION

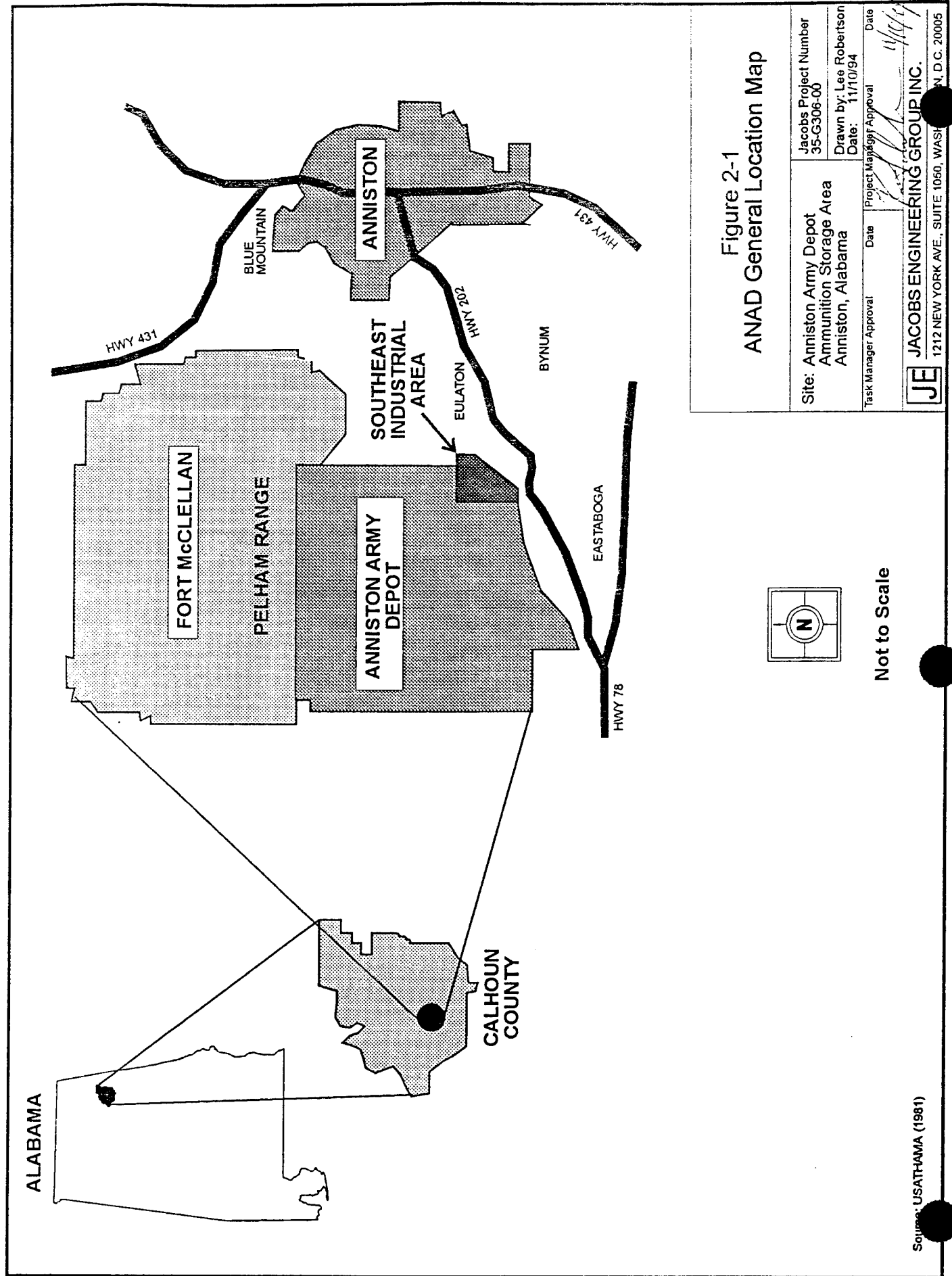
2.1.1 Regional Setting

ANAD is located in northeastern Alabama as shown in Figure 2-1. It is 110 miles west of Atlanta, Georgia, 50 miles east of Birmingham, Alabama, 100 miles north of Montgomery, Alabama, and 25 miles south of Gadsden, Alabama, in the southwestern section of Calhoun County; the towns of Eulaton and Vinnette are less than 2 miles directly east of ANAD. The City of Anniston is located within 10 miles east of ANAD; it is surrounded by the suburban areas of Westend-Cobb Town, Blue Mountain, Oxford, and Hobson City. The location of the site with respect to major population centers and other topographic features is presented in Figure 2-2.

2.1.2 Demography and Land Use

The 1990 census for Alabama reports that a total of 116,034 persons reside in Calhoun County and a total of 75,674 reside in the Anniston Division of Calhoun County (Table 2-1). The division contains ANAD and surrounding communities of Anniston City, Westend-Cobb Town Census Designated Place (CDP), Blue Mountain Town, Hobson City Town, Bynum CDP, Oxford City, Fort McClellan CDP, Saks CDP, and Weaver City (Bureau of the Census, 1990). The largest population center near ANAD is Anniston, with a population of 26,623.





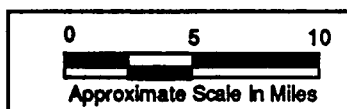
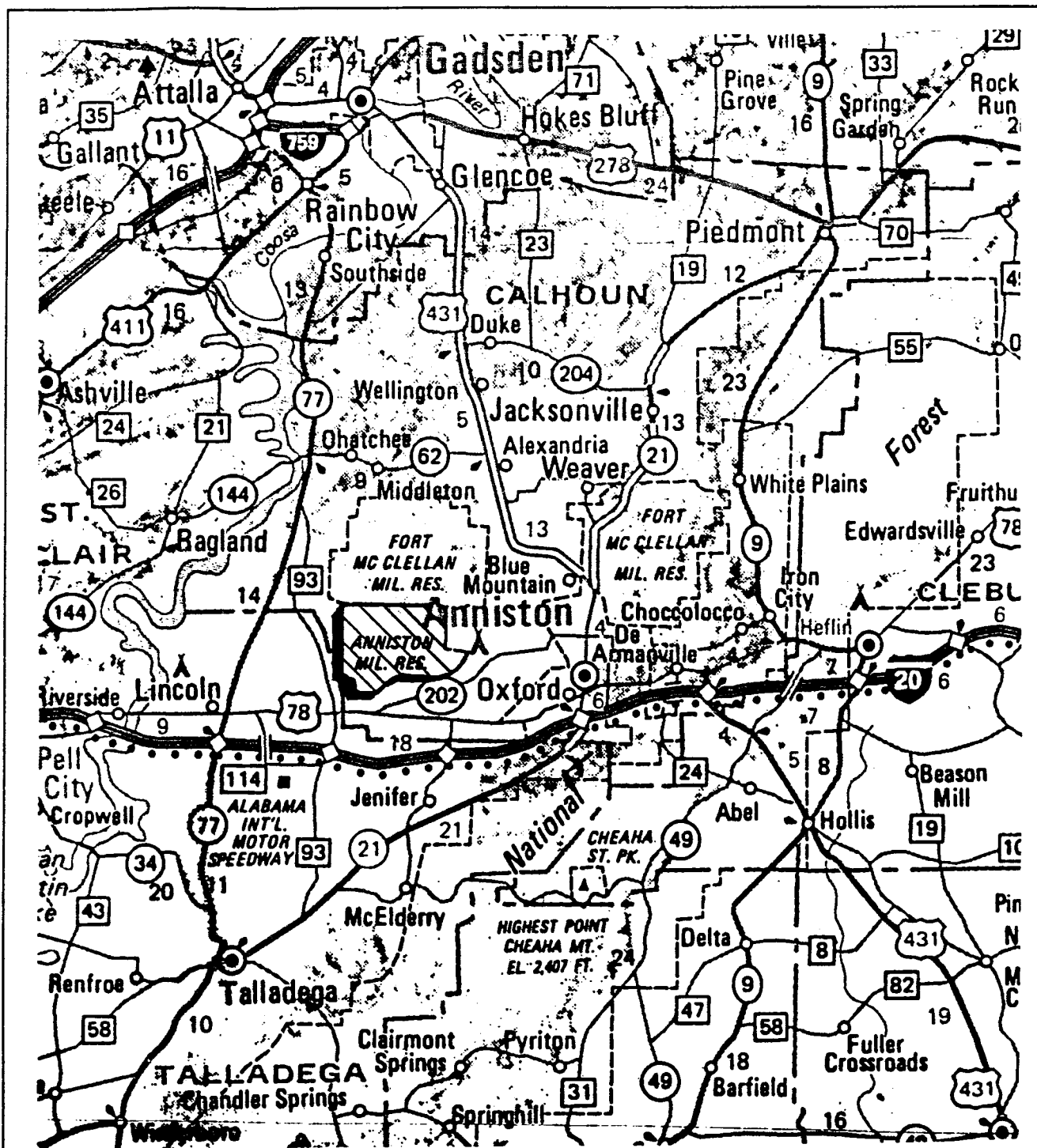



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SITE LOCATION:		
ANNISTON ARMY DEPOT ANNISTON, ALABAMA		FIGURE NO.
 JACOBS ENGINEERING GROUP INC.		
DRAWN BY:	DJK	
DATE:	4/27/92	
CHECKED BY:	JL	
DATE:	4/27/92	2-2

Table 2-1. 1990 Land Area and Population Density for Calhoun County, Alabama

COUNTY, COUNTY SUBDIVISION AND PLACE	ALL PERSONS	LAND AREA	
		SQUARE KILOMETERS	SQUARE MILES
CALHOUN COUNTY	116,034	1,576.0	608.5
ANNISTON DIVISION	75,674	532.4	205.6
ANNISTON CITY	26,623	52.3	20.2
BLUE MOUNTAIN TOWN	221	0.2	.08
BYNUM CDP	1,917	8.6	3.3
FORT McCELLAN CDP	4,128	18.3	7.1
HOBSON CITY TOWN	794	3.0	1.2
OXFORD CITY (PT.)	8,333	24.2	9.3
SAKS CDP	11,138	31.8	12.3
WEAVER CITY	2,715	6.3	2.4
WESTEND—COBB TOWN CDP	4,034	13.1	5.1
CHOCOLOCOCO DIVISION	4,740	241.8	93.4
JACKSONVILLE DIVISION	15,216	185.7	71.7
JACKSONVILLE CITY	10,283	17.4	6.7
OHATCHEE DIVISION	3,367	178.3	68.8
OHATCHEE TOWN	1,042	12.7	4.9
SOUTHSIDE CITY (PT.)	54	4.0	1.5
PIEDMONT DIVISION	7,902	175.5	67.8
PIEDMONT CITY (PT.)	5,286	21.9	8.5
WEBSTERS CHAPEL—ALEXANDRIA VALLEY DIVISION	9,135	262.3	101.3
GLENCOE CITY (PT.)	7	0.4	0.15
SOUTHSIDE CITY (PT.)	90	0.6	0.23

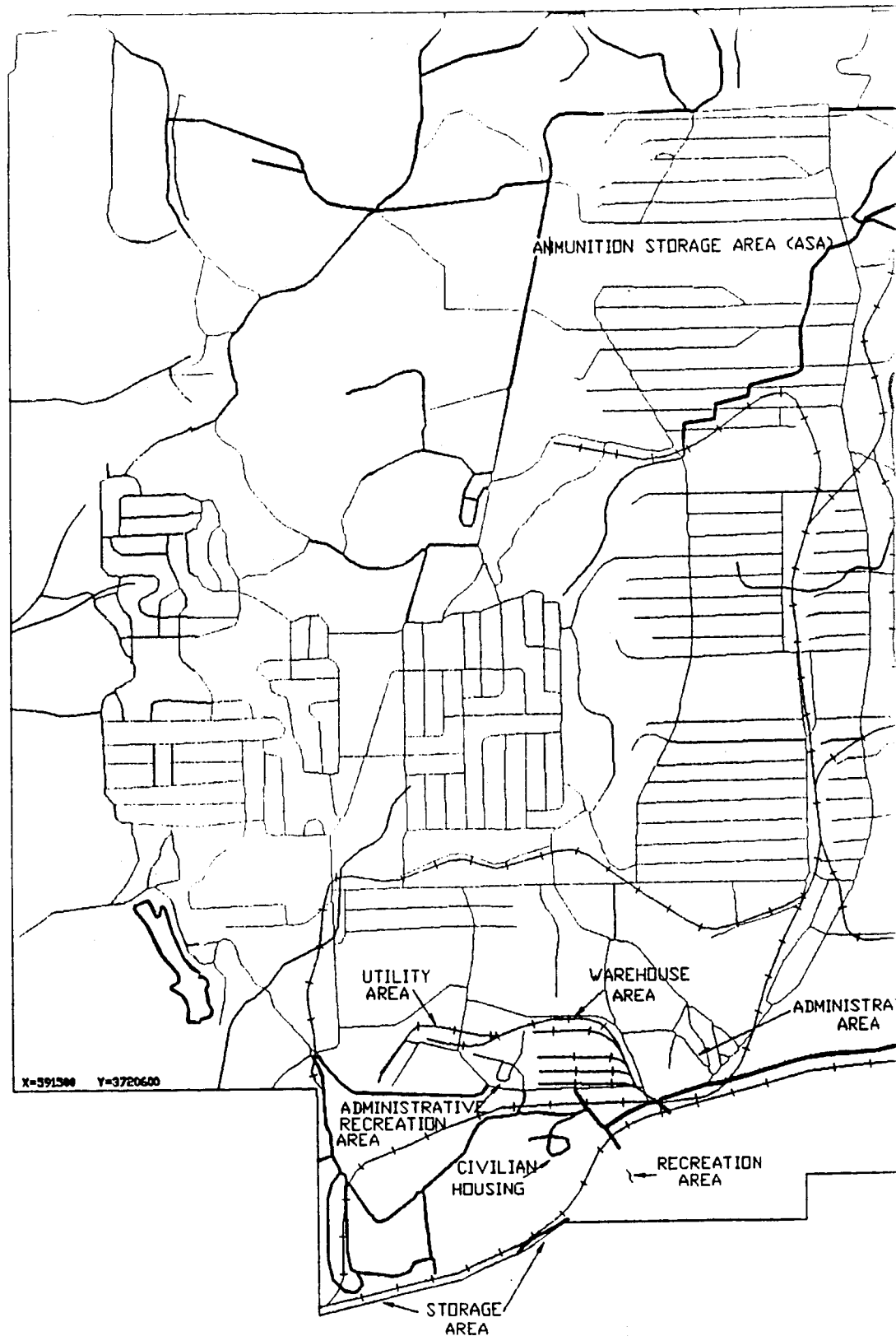
NOTE: When a city or town is in more than one division, PT. signifies that part of that city is in the specified division.

The area is serviced by a network of state and federal highways including Interstate 20, which connects the major population centers of Atlanta and Birmingham. The Coosa River, one of the major drainages in northeastern Alabama, flows in a southwesterly direction approximately 5 miles to the west of the depot. Access to ANAD is restricted by a chain link fence that encloses the entire depot. The major features in the immediate vicinity of ANAD include a series of small communities clustered primarily along the southern and eastern boundaries of the depot. A catfish farm is located approximately 300 feet southeast of ANAD's boundary. ANAD is bordered on the north by the Fort McClellan Military Reservation.

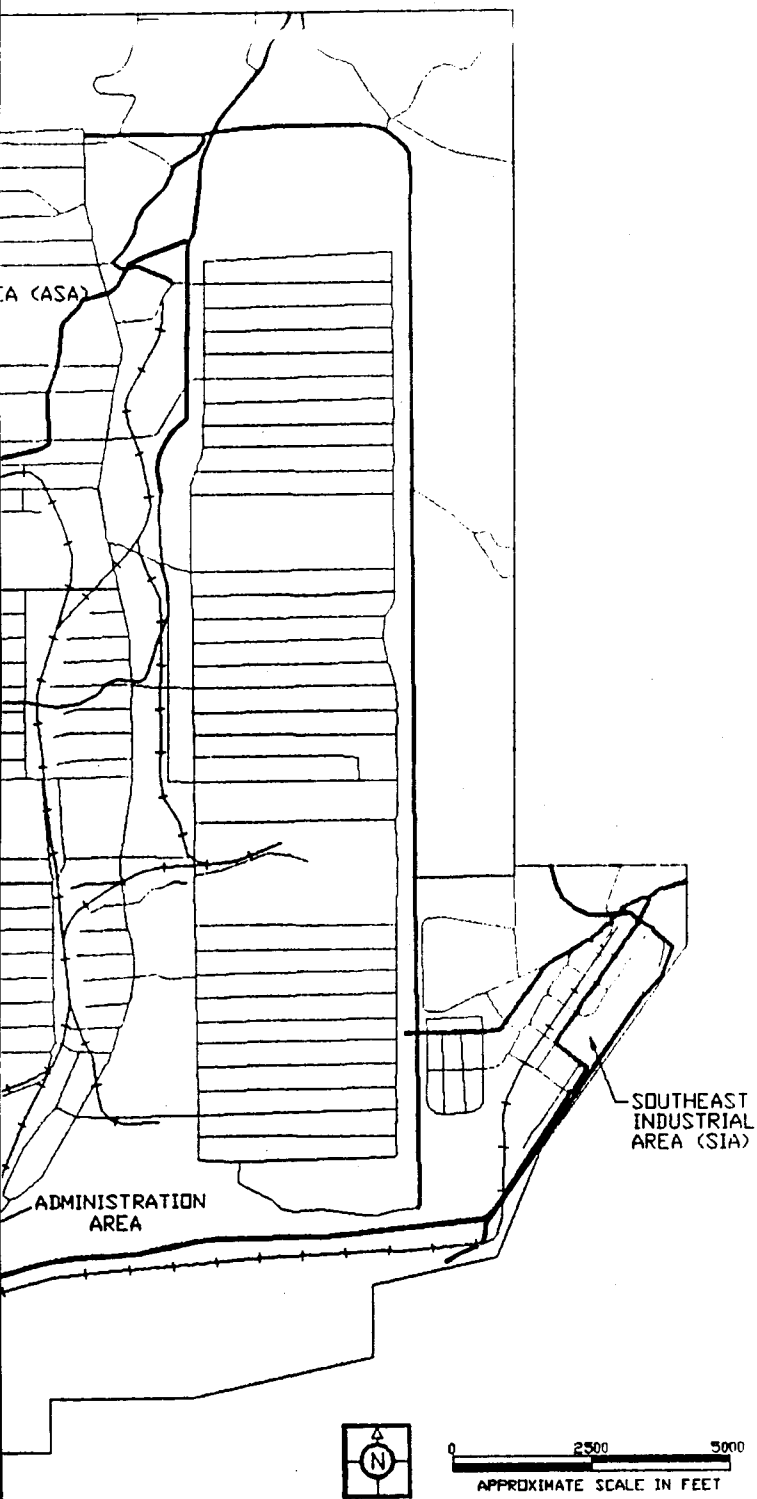
Calhoun County is both industrial and agricultural. Industry is highly diversified and includes the manufacture of textiles, chemicals, steel, paper, and electronic products. In addition to the military installations, such as ANAD and Fort McClellan, other industries in the county include the processing of food and agricultural products. The principal source of agricultural income is poultry; other important sources are dairy products, cattle, hogs, and cotton.

2.1.3 ANAD Site Description

The roughly square-shaped configuration of ANAD in the general facility layout map shown in Figure 2-3 encompasses approximately 15,200 acres. Ammunition storage bunkers occupy the majority of the depot with individual areas, primarily along the southern boundary, allocated for warehouse storage, storage tanks, administration, shop/industrial facilities, and recreation. The main vehicle access is in the south-central portion of the depot via State Highway 202. The site is serviced by Southern Railroad, which maintains an extensive network of spur lines primarily within the southern industrial/storage complexes.



Source: ADC (American Digital Cartography), US Army Corp. of Engineers, Mobile, Alabama



Note: Outside Border is Approximate
ANAD Boundary

ANAD GENERAL FACILITY LAYOUT MAP

SITE NAME/LOCATION AMMUNITION STORAGE AREA ANNISTON ARMY DEPOT ANNISTON, ALABAMA	REVISIONS				JACOBS PROJECT NO. 35G30600
	DRWN BY	DATE	CHG BY	DATE	
	HLM	6/30/92	GAF	7/20/92	
	NTR	2/26/93	BR	2/17/93	



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FIGURE
NO.
2-3

ANAD is divided into nine areas, briefly described below:

- Administration Area — The Administration Area is located in the south-central portion and consists of a series of permanent structures and contains the installation headquarters.
- Administration Recreation Area — The Administration Recreation Area was the original administrative area for the depot and is located to the west of the present administration facilities. It consists of a series of structures which house the facility engineer and communication center, the fire fighter headquarters, the officer quarters, and open mess. The area contains recreational facilities including tennis courts, shuffleboard courts, and a picnic area.
- Utility Area — This area located directly west of the administration recreation area, is utilized for various depot support operations. Most of the facilities engineer shops are located in this area. It also contains the main motor pool, administrative vehicle repair shops, equipment repair shops, and property disposal facilities.
- Civilian Housing Area — The Civilian Housing Area covers approximately 15 acres and is located directly east of the Administration Recreation Area. The area contains approximately 100 family-housing units which are currently unoccupied and are scheduled to be demolished in 1997.
- Storage Area — This area is located adjacent to the southern boundary of the depot immediately southwest of the Civilian Housing Area. The area contains a series of steel tanks used to store vehicles and other major supply items, a series of 10 transitory shelters, and a processing facility building.
- Warehouse Area — The Warehouse Area is located in the western portion of the depot and includes general supply; the shipping and receiving building; three large storage warehouses; and a series of smaller, general purpose warehouses.
- Recreation Area — This area is located to the south of the present Administration Area and contains the post commissary, a gymnasium, a filled-in swimming pool, and a bath house.
- Southeast Industrial Area (SIA) — This area is located in the southeastern portion of the depot and contains general purpose warehouses, depot maintenance, materiel rebuild and support shops, general supply processing facilities, major items in-loading and out-loading facilities, and vehicle test facilities.
- Ammunition Storage Area (ASA) — The Ammunition Storage Area occupies the entire central and northern portions of the depot. The area contains approximately 1,300 ammunition storage magazines. An ammunition maintenance workshop complex is located in the center of the ASA. This complex consists of the operating buildings required for maintenance, demilitarization, and inspection of all types of ammunition and ammunition components. Other facilities located within this service and storage area are the Lance Missile Fueling Facility and ammunition disposal areas used for the disposal of out-of-date and deteriorated explosives.

2.2 SITE HISTORY

The U.S. Army has operated ANAD for over 50 years. During that period, the depot mission has progressively expanded to include the storage of munitions and the refurbishment, testing, and decommissioning of combat vehicles and various types of ordnance. This expanding mission resulted in a changing and evolving approach to the control and management of generated solid and liquid wastes.

The initial mission for the U.S. Army depot at Anniston was munitions storage. Construction operations for the depot were initiated on February 17, 1941, and the first ammunition storage magazines were completed on October 3, 1941. The facility was officially designated as the Anniston Ordnance Depot on October 14, 1941.

During World War II, the mission of the depot was expanded to include a combat equipment storage area, and over 1,230,000 tons of materiel were handled. Although the Ordnance Department operated the depot, the Chrysler Corporation assumed management responsibilities during the later part of 1943; depot operations were the responsibility of a subsidiary of Chrysler known as the Anniston Warehouse Corporation.

Over the years, Anniston's mission was further expanded to include the overhauling and repairing of ordnance vehicles; fire control and small arms rebuild from the Augusta Arsenal (closed in 1954); modification of M48A1 tanks and M67 flame throwers; calibration support for the southeastern states; and logistics support for the Lance missile, Shillelagh and TOW systems, and the Dragon missile. The bulk of this work was conducted in the SIA.

On August 21, 1962, as a result of Army reorganization, the depot was redesignated a Class II installation under the United States Army Supply and Maintenance Command and was retitled Anniston Army Depot. In July 1966, with the merging of higher headquarters, the depot was placed under the United States Army Materiel Command, which was redesignated the U.S. Army Materiel Development and Readiness Command in January 1976.



Currently, ANAD is one of the major employers in the Anniston area. Approximately 3,900 people work at the depot, but live off-site. Five military personnel and dependents reside on the depot grounds in military housing.

2.3 PREVIOUS INVESTIGATIONS

ANAD is participating in the Department of Defense Installation Restoration Program, which was established in 1978 to identify and evaluate past Department of Defense hazardous waste sites and to control the migration of hazardous contaminants from these sites. A number of studies have been conducted at ANAD to support the Installation Restoration Program as well as other environmental management programs. These studies have yielded a significant amount of information on the extent of contamination at ANAD. However, only a small portion of this work has been performed in the ASA. Some of the studies have resulted in the alteration of certain waste management practices and the implementation of remedial operations.

In September 1979, the Mobile District of the Corps of Engineers contracted with Environmental Science and Engineering, Inc. (ESE) to investigate four solid and hazardous waste disposal facilities. Three of the facilities located in the SIA and a fourth, the TNT Washout Facility Leaching Beds (SWMU #11) located in the ASA, were evaluated to determine the potential for contamination of groundwater, surface water, and air, and to recommend actions to bring the sites into compliance with state and federal regulations. At SWMU #11, four wells were sampled to determine groundwater quality in the shallow aquifer, and two surface water samples from a stream just east of the site were analyzed.

In 1987, NUS Corporation (NUS) conducted a Facility Assessment as required by the Resource Conservation and Recovery Act (RCRA) to evaluate releases of hazardous waste or hazardous constituents (NUS, 1987). The assessment provided information on 38 SWMUs (13 located in the ASA), evaluated the potential for release to the environment, and determined the need for further investigation. The report discussed each identified SWMU in terms of site description, waste characteristics, migration pathways, and evidence of release. For those SWMUs in the ASA, NUS



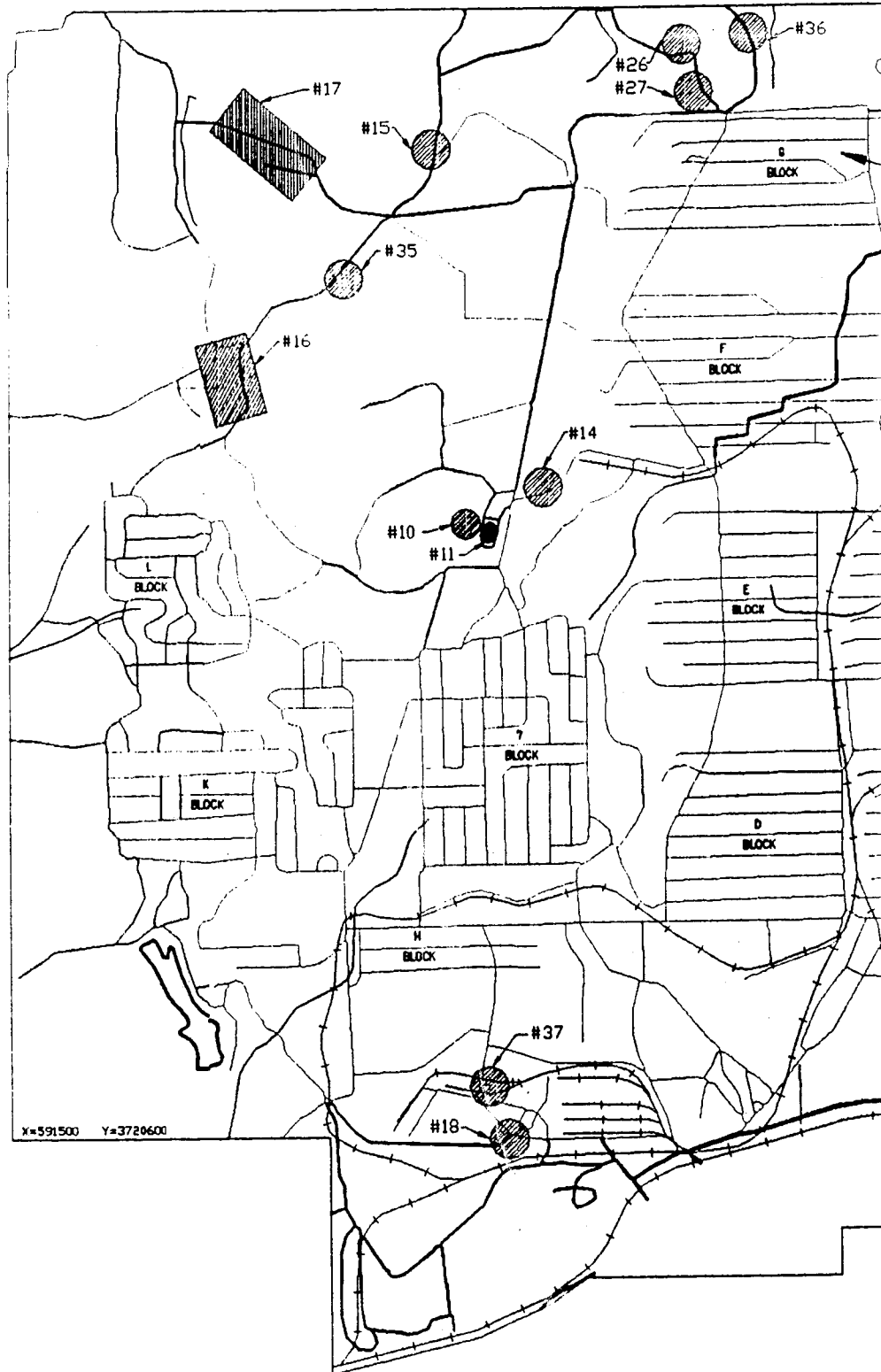
recommended no further action for seven SWMUs (#5, #14, #18, #26, #27, #36, and #37), referred one SWMU (#34) to another environmental program office for further assessment, recommended a sampling investigation at four SWMUs (#10, #15, #16, and #17), and recommended a remedial investigation at one SWMU (#11).

In 1989, ESE prepared a remedial investigation report. The report (ESE, 1989) presented a comprehensive overview of the past and present contaminant remediation activities for all of ANAD, including the ASA. Information compiled included a summary of generated wastes, SWMU descriptions, a summary of on-depot soil boring data, a history of groundwater chemistry data for the SIA, a summary of preliminary results of off-depot investigations, and an off-depot endangerment assessment.

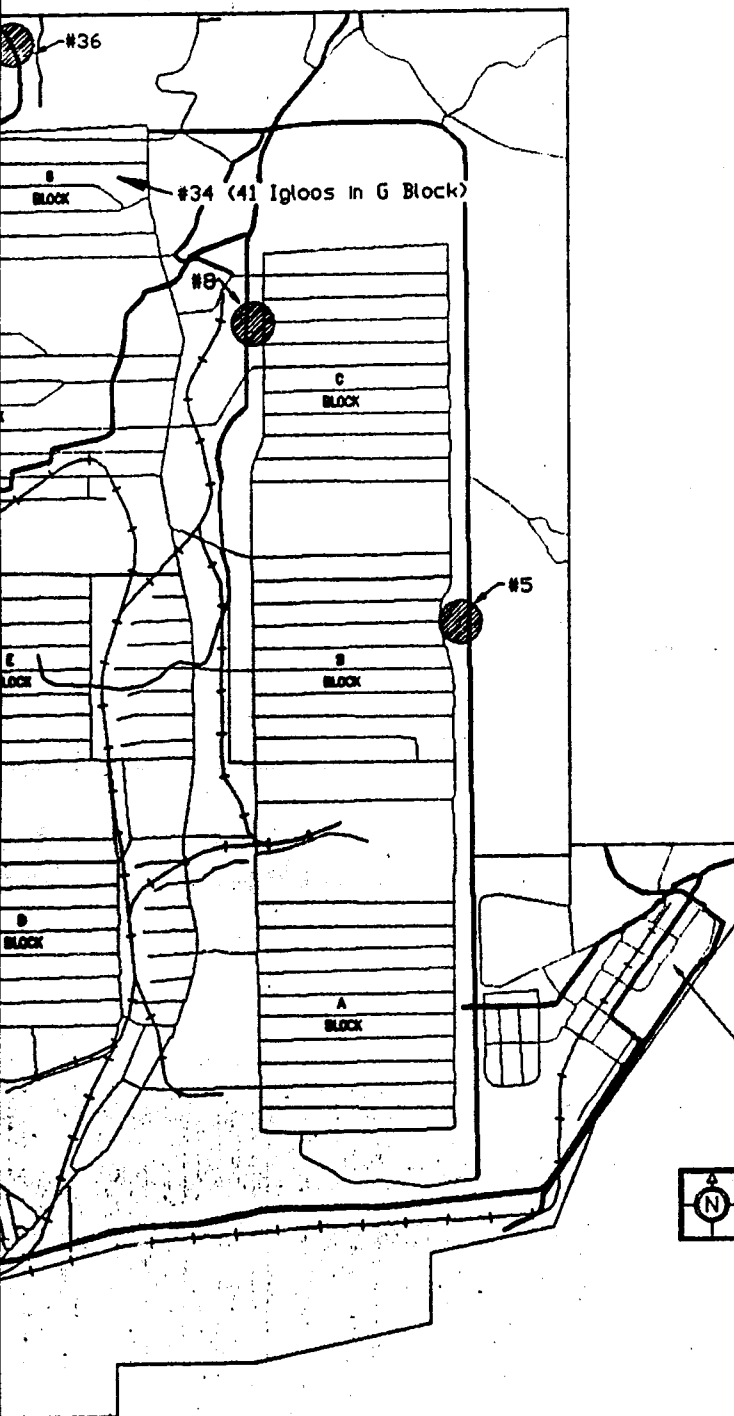
2.4 SWMU DESCRIPTIONS

Thirteen identified SWMUs are located within the ASA. Two other SWMUs, located within the Administration Area, are included in this ESI. These 15 SWMUs are areas known or suspected to be contaminated from past waste disposal, treatment, or storage practices. At ANAD, SWMUs are assigned numbers according to a convention started in the 1980s (ESE, 1989) which also applies to SWMUs located in the SIA. Hence, SWMUs addressed in the ESI are not consecutively numbered. A brief history and description of each SWMU that was evaluated follows. Locations are shown on Figure 2-4.

SWMUs that are currently in use are identified as such in the individual SWMU descriptions. Investigations reported in this ESI were concerned with evaluation of potential contaminant releases during past or existing (at the time of investigation) operations. Four of the SWMUs investigated have RCRA permit applications under review by ADEM. Any potential contamination from on-going operations at these four SWMUs will be addressed under the forthcoming permits.



Source: ADC (American Digital Cartography), US Army Corp. of Engineers, Mobile, Alabama



SOLID WASTE MANAGEMENT UNIT (SWMU)

- # 5 - Sinkhole
- # 8 - Acid Disposal Pit
- #10 - TNT Washout Facility
- #11 - TNT Washout Facility Leaching Beds
- #14 - Laundry Waste Leaching Facility
- #15 - Propellant Disposal Area
- #16 - Burning Grounds
- #17 - Denitration Pit
- #18 - Old Sewage Treatment Plant
- #26 - North TNT Burial Pit
- #27 - South TNT Burial Pit
- #34 - Chemical Storage Igloos
- #35 - Deactivation Furnace
- #36 - Drill and Transfer Site
- #37 - Vehicle Wash Rack

SOUTHEAST INDUSTRIAL AREA



0 2500 5000
APPROXIMATE SCALE IN FEET

Note: Outside Border is Approximate
ANAD Boundary

SWMU LOCATIONS IN ASA

SITE NAME/LOCATION	REVISIONS				JACOBS PROJECT NO.
	DATE BY	DATE	DATE	DATE	
AMMUNITION STORAGE AREA ANNISTON ARMY DEPOT ANNISTON, ALABAMA	NJM	6/30/92	DAF	7/20/92	35G30800
	NFR	2/26/93	BNK	2/17/93	



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FIGURE
NO.
2-4

2.4.1 SWMU #5 — Sinkhole

The Sinkhole (SWMU #5) is located immediately east of the 900 Row of B-Block between Alabama Avenue and the Restricted Area perimeter patrol road. This SWMU is approximately 0.63 acres in area, 40-50 feet deep, and contains a pond. Previous reports state that the Sinkhole was developed from geologic processes that form karst topography (ESE, 1989). Although karst origin of the Sinkhole is a possibility because of the underlying carbonate strata, some doubt exists concerning the origin of this feature. The depression was suspiciously not mapped by the USGS and Alabama Highway Department during a 1977 survey of natural sinkholes and depressions in this area of Calhoun County (Technos, 1981).

The steep sides of the sinkhole are atypical of other sinkholes in the area (Ewers Water Consultants, personal communication, 1993). Aerial photographs of the area taken before ANAD was constructed show the same steep-sided nature of the Sinkhole (ANAD-RMD files). This suggests that either the feature has enlarged recently (within the last 100 years or so) or was significantly disturbed by human activity before ANAD was built. Warman and Causey (1962) discuss historic iron ore and chert mining in this portion of Calhoun County. Iron ore was mined from Cambrian and Ordovician formations as early as 1848. The area of ore deposits extends from Cane Creek/Pelham Range north and eastward to Oxford. Chert pits excavated for road metal are also common in siliceous dolomites of the region.

SWMU #5 was used periodically from 1942 to 1978 for disposal of various wastes including construction debris, burned ammunition components, railroad ties, and empty containers (USTHAMA, 1978). During a survey for the 1978 Installation Assessment, containers labelled ammonium hydroxide, sodium hydroxide, and sodium hypochlorite were observed in the area. In 1978, drums and other large debris were removed from the Sinkhole; no visual evidence of contamination was noted (USAEHA, 1986).

2.4.2 SWMU #8 — Acid Disposal Pit

The acid disposal pit (SWMU #8) is a concrete pit located in the Chemical Limited Area (CLA) of the ASA between C-Block and G-Block. SWMU #8 was used circa 1959-1961 before the Old Lagoons Facility (SWMU #12 in the SIA) was placed in service. The Installation Assessment Report (USATHAMA, 1978) indicates that wastes disposed in the pit included paint stripper, alkalies, cadmium, phosphoric acid, and stripped paint containing lead and zinc chromate. These wastes were possibly contained in drums. The concrete pit was reportedly filled in with sand after its use as a disposal pit was discontinued (USATHAMA 1978). The sand was used previously for cleaning metal parts. The area in vicinity of the pit is now overgrown with trees and grass.

Previous reports available to Jacobs at the time of the field investigations did not contain sufficient information or information of sufficient quality to determine an exact location for the pit with respect to identifiable landforms or site buildings. Maps showing the location of SWMU #8 cover areas of the CLA ranging from approximately 90,000 (USATHAMA, 1978) to greater than 280,000 square feet (ESE, 1989). A map produced for the ESI work plan shows an assumed location of the pit in a wooded area west of storage igloo C-809, east of Building 611, and south of a bauxite storage area. See Section 5.3.2 for additional detail on the search for SWMU #8.

2.4.3 SWMU #10 — TNT Washout Facility

The TNT Washout Facility (SWMU #10) is located in the central portion of the ASA approximately 3,300 feet north of I-Block. It consists of a large metal building (Building 172) and a waste water sedimentation tank located approximately 100 feet north/northeast of the building. TNT washout operations were conducted from 1948 until the mid 1950s. Access to the interior of the building is restricted due to explosive hazards.

A waste slurry stream from ammunition washout operations discharged from the building to the sedimentation tank. Overflow from this tank then discharged through a pipe under the road into leaching beds (SWMU #11). The facility was closed in the mid 1950s except for occasional use in a pelletizing operation through the late 1960s, and is currently inactive.

The sedimentation tank is approximately 6 feet wide, 10 feet long, open-topped at ground level, and filled with water. The area around the tank is partially paved and graveled with weeds growing in spots. A small drainage ditch is located beyond the sedimentation tank along the northern border of the facility area.

2.4.4 SWMU #11 — TNT Washout Facility Leaching Beds

The TNT leaching beds, (SWMU #11) are located across the road from SWMU #10, east of Building 172. Overflow from the sedimentation tank was directed into the beds for treatment and disposal. The leaching beds are described as a series of 24 parallel soil troughs located at the surface, each approximately 70 feet long, 8 feet wide (USATHAMA, 1978 and USAEHA, 1986), and 4 feet deep (personal communication, ANAD-RMD and ANAD-Safety). Overall, the beds occupy an area of approximately $\frac{3}{4}$ acres. A small intermittent stream is located along the east side of the SWMU within 15 feet of the beds. A 1 to 2 foot earthen berm was constructed along the eastern perimeter of the beds to prevent direct runoff into the stream. Intrusive activities within the bed are limited because of an explosive hazard.

From 1948 until the mid 1950s, the leaching beds received waste water from the TNT Washout Facility sedimentation tank. From the mid 1950s through the late 1960s, the beds were also used occasionally for disposal of wash water from pelletizing system filters. In April 1978, an unknown quantity of octol pink water was discharged to the beds at a concentration of 15 parts per million. The beds have not been used since April 1978. In 1985, the area was leveled and capped with 2 to 5 feet of native clay, but there was no official closure. Remaining explosive contaminated waste/soil was estimated to be three to four feet thick (USASEHA, 1986). An Army report by the USAEHA from 1986 notes that "soil and three of the groundwater samples (AAD14 and 2 of the dug wells) contained high concentrations of 2,4,6-TNT and RDX" (USAEHA, 1986).

Five monitoring wells were installed around the leaching bed during two previous environmental studies. Wells W2-19 and W2-20 were drilled upstream and downstream of the beds in approximately 1978 by the U.S. Army Environmental Hygiene Agency (USAEHA). Wells AAD-13, AAD-14, and AAD-15 were installed around the perimeter of the leaching beds in 1980 by ESE. Reports suggest that some of the wells (well numbers unknown) may have been damaged or destroyed during the 1985 capping of SWMU #11. "Only the upgradient wells remain" was stated in an evaluation of SWMU #11 (USAEHA, 1986).

2.4.5 SWMU #14 — Laundry Waste Leaching Facility

The Laundry Waste Leaching Facility (SWMU #14) is located approximately 950 feet northeast of the TNT Washout Facility (Building 172) on the north side of the road leading to the Ammunition Workshop from Elwood Avenue. The laundry (Building S-162, demolished circa 1973) was used from 1948 to 1973 to wash the clothing of workers who handled explosives. One machine was used to wash 7 to 8 loads of clothing per day. At capacity, approximately 1,400 to 1,600 gallons per day of waste water containing soap, lye, and entrained explosive materials were generated. Waste water from the washing machine appears to have been piped to an above grade sump to remove heavy solids and then to the leaching bed. Runoff from the leaching bed area discharges to a nearby stream.

2.4.6 SWMU #15 — Propellant Disposal Facility

The Propellant Disposal Facility (SWMU #15) is located in the northwest portion of the depot approximately 2400 feet northeast of Building S-662 along the east side of the road to Gate E-1. Propellant disposal operations were conducted at the site from approximately 1968 to 1978. SWMU #15 is currently inactive and overgrown with brush. Topography of the SWMU #15 area slopes gently to the southwest. A drainage ditch is located along its southwestern boundary.

SWMU #15 consists of a one acre, fenced field on which two open, concrete-lined disposal units were constructed for burning propellants from Lance missiles. The propellant disposal units consist of concrete pads and small incinerators. One unit was used to dispose of unsymmetrical dimethylhydrazine (UDMH); the other was used to dispose of inhibited red fuming nitric acid (IRFNA). Diesel fuel was used to help ignite and burn the IRFNA. Concrete troughs connect the pads and incinerators to sumps which appear to have been designed to contain spills of propellant. The sump servicing the northernmost unit contains a metal box. Limestone gravel was placed in the sump servicing the southern unit.

Fuel for the incinerators was supplied either from a diesel fuel tank or liquified petroleum (LP) gas tank. A diesel fuel tank (approximately 500 gallon capacity) remains onsite while only a distribution manifold for the LP gas was observed. No documentation of spills at SWMU #15 has been found in this or previous investigations.

2.4.7 SWMU #16 — Burning Ground

The Burning Ground (SWMU #16) is located in the northwestern portion of the depot on the Gate 2 to Gate E Road approximately one mile southwest of Building S-662. The site covers approximately 35 acres in a small, flat-floored valley. Trees and other vegetation have been cleared from most of the area. SWMU #16 has been used for open burning (OB) operations for over 40 years. The site remains an active OB facility. A RCRA Subpart X Permit application has been submitted to ADEM for the OB operation. The application is currently under review.

The actual burning area covers approximately 6 acres of the valley floor and measures approximately 350 feet by 750 feet. In the past, explosives and explosive-contaminated materials were placed in open, unlined soil burn beds, soaked with diesel fuel, and ignited.

Three pits formerly used in burning operations are located at SWMU #16. Pit number 1 was used for burning of "Comp. B" explosive compound. Octol was burned in pit number 2. Materials burned in pit number 3 include white phosphorus, hexachloroethane, octol, and possibly other hazardous material. The burning process at times resulted in incomplete destruction of the wastes; residues were not removed from the pits (personal communication, ANAD-RMD). Jacobs was requested by ANAD Safety Officers to avoid these areas during the investigation because of the extremely hazardous nature of the buried materials.

Current burning operations are conducted in fifteen steel burning pans, a burn cage, or a fenced dunnage burning area. Materials are mixed with excelsior and ignited with an ignitor and non-electric fuse. Materials commonly burned include scrap explosives and explosive-contaminated material, demilitarized ammunition, containers, boxes, and inert materials. Remaining salvageable materials are removed to the salvage yard; ash is handled as hazardous waste.

Soil around the former burn beds was excavated and removed because it contained elevated levels of lead. The current practice is to remove lead foil from the propellant before it is burned (personal communication from ANAD Burning Ground Supervisor). Intrusive sampling activity within this SWMU is restricted due to explosives hazards.

2.4.8 SWMU #17 — Demolition Pit

The Demolition Pit (SWMU #17) is located near the northwest corner of the depot approximately 2400 feet northwest of Building S-662. The demolition pit is located in a cleared area that occupies approximately 40 acres of a small valley. There is a small intermittent stream at the base of the valley. The pit is approximately 5 acres in area and contains multiple soil detonation sites located either at or beneath the surface (ESE, 1989). Aerial photographs show the Demolition Pit has been operated for at least 40 years. SWMU #17 remains an active open detonation (OD) facility. A RCRA Subpart X Permit application has been submitted to ADEM for the OD operation. The application is currently under review.



The pit is used for destruction of high explosive items including cartridges and projectiles of various calibers, bombs, grenades, rockets, warheads, mines, etc. Items may be detonated at depths ranging from ground level to approximately 14 feet depending on the type and amount of explosive material (USAEC, 1978). Debris from demolition pit operations (e.g., shell casings, bomb and rocket fragments) is scattered around the area by the explosions. Encountering unexploded ordnance is always a possibility at SWMU #17. Intrusive sampling activity within this SWMU is restricted due to explosive hazards.

2.4.9 SWMU #18 — Old Sewage Treatment Plant (STP)

The Old Sewage Treatment Plant (SWMU #18) is located in the southwestern area of the depot on the south side of Gadsden Avenue, south/southwest of the ANAD Administration Area. (Although this SWMU is not within the ASA boundaries, it is within the scope of the ESI). The Old STP was used from 1942 to 1982 to treat domestic sewage from the west area of the depot. The treatment plant was originally designed to treat wastewater at a capacity of 75,000 gallons per day. Original design drawings show a bar rack, Imhoff tank, trickling filter, and sludge-drying beds. A final clarifier and effluent chlorination tank were added to the STP in 1975. Effluent was discharged to Eastaboga Creek which flows past, but not into, the state fish hatchery located at the ANAD southwest boundary.

The area surrounding the abandoned STP is graveled and covered with grass. The trickling filter is currently used as a fire fighting training pit. For this use, the filter sludge discharge pipeline was plugged and the filter was lined with firebrick. During fire-fighting training exercises, the filter is filled (as needed) with water, diesel fuel is poured on the water, ignited, and extinguished. An emergency oil/water separator was added to prevent accidental overflow of diesel fuel from the filter.

2.4.10 SWMUs #26 and #27 — North TNT Burial Pit and South TNT Burial Pit

The North and South TNT Burial Pits (SWMUs #26 and #27) are located in a remote section of the depot near the northern installation boundary along the road leading from Gate E-1 to the Chemical Limited Area gate on the north side of G-Block. Aerial photographs from 1969 clearly show these pits as open rectangular excavations. Estimated dimensions taken from these photographs indicate both pits are roughly the same size, approximately 50 feet long and 25 feet wide. SWMUs #26 and #27 were backfilled and are currently well vegetated. They show little evidence of past burial activities except for immature trees and four posted "Closed Landfill" warning signs around each pit. The area surrounding the pits is heavily wooded. Intrusive activities within these SWMUs is restricted due to possible explosive hazards. Reports suggest that TNT-contaminated wastes and decontamination dunnage from project "Z" may have been burned and buried in these pits (ESE, 1989). Documentation confirming waste burning or burial has not been found in this or previous investigations. ESE, 1989 quotes a "Memorandum of Record (Williams, 1982)" which "stated that between 1967 and 1969 decontaminated dunnage from "Project Z" was burned" at "an 'Old Burning Pit north of the Chemical Exclusion Area'". However, Jacobs was unable to locate this memorandum during the ESI or find any independent confirmation of this statement. Available aerial photographs show no excavations at the sites in 1957 although both sites have been cleared of trees. In the 1969 photographs, excavations and areas cleared of vegetation around the pits are evident at both sites. Aerial photographs from 1977 show both sites overgrown with small trees; outlines of the pits are visible in the clusters of trees.

2.4.11 SWMU #34 — Chemical Storage Igloos

Forty-one Chemical Storage Igloos (SWMU #34) are located in G-Block inside the Chemical Limited Area (CLA). M55 rockets which contain GB and VX nerve agents are stored in these igloos. The rockets have been declared obsolete and are classified as hazardous waste.

The igloos in SWMU #34 are earth-covered, semicircular arches with a maximum ceiling height of approximately 13 feet and floor dimensions of approximately 26.5 feet wide and 60 to 80 feet long. Gutters are located inside the igloos along the base of the sidewall and slope gently toward the front of the igloo. The gutters are connected to 4-inch pipes which extend through the front wall of the igloo and discharge to outside. The igloos are equipped with air vents located at the top of the back wall and on the door.

Monitoring for nerve agent leaks from the M55 rockets is performed within the igloos on a weekly basis. Any rocket discovered to be leaking is packed in a special leak-proof container, which is also stored in one of the forty-one igloos. These weapons were previously stored in igloos at F-Block until they were moved to their present location during the 1970s. Agent decontamination wastes are stored in the igloos in 55-gallon drums.

A RCRA Hazardous Waste TSD Part B Permit application has been submitted to ADEM for forty-one storage igloos. The application is currently under review. Access to this SWMU is restricted due to the toxic chemical hazard.

2.4.12 SWMU #35 — Deactivation Furnace

The Deactivation Furnace (SWMU #35) is located in Building 393 in the northwest quarter of ANAD along the southeastern side of the Gate 2 to Gate E Road. SWMU #35 lies approximately 1500 feet southwest of Building S-662 and 2400 feet northeast of the Burning Ground (SWMU #16). Building 393 was constructed on a concrete pad and is surrounded by a gravel-covered parking lot. A small stream is located approximately 175 feet south/southwest of SWMU #35.

The facility is used to deactivate small arms munitions up to 50 caliber with less than 600 grains energetic material. Munitions are fed into a rotating retort where propellants are burned and lead projectiles are melted. Empty brass and steel shell casings are collected in a bin; molten lead is collected in an ingot mold. Particulate emissions from the furnace

are collected in a bag house where the dust is drummed and stored as a hazardous waste. Although the furnace is currently inactive, operations will resume upon approval of the RCRA Part B Permit application which ADEM is currently reviewing.

A leaking 1,000 gallon underground diesel fuel tank was located approximately 30 feet from the furnace building. Circa 1990, the tank was removed and surrounding contaminated soils were remediated in accordance with ADEM requirements. An above ground fuel tank was installed to replace the underground tank.

2.4.13 SWMU #36 — Drill and Transfer System Site

The Drill and Transfer Site (SWMU #36) is located approximately 900 feet north of G-Block between G-Block and the northern depot boundary. The site was constructed circa mid-1970s and was used until the early 1980s. SWMU #36 is currently abandoned. Three conex storage containers, a small laboratory building, and a concrete-floored pavilion with a corrugated metal roof remain in the fenced one acre site. Topography slopes moderately to the east/northeast from SWMU #36 toward a small stream approximately 150 feet from the fence.

Chemical agents were transferred from leaking chemical munitions into ton containers (ESE, 1989). Agent transfers were performed at the pavilion in glove boxes under negative pressure. Exhaust air from the glove boxes was filtered through charcoal and monitored for chemical agents. The floor of the pavilion was designed to contain any agent spills and the decontaminating fluids used to clean up a spill.

Other reports indicate the site was used for chemical quality assurance testing of GB-containing munitions (USATHAMA, 1978). Small quantities of agent were removed from rounds and tested. All of the agent extracted from the munitions was consumed in the tests.

2.4.14 SWMU #37 — Vehicle Wash Rack

The Vehicle Wash Rack (SWMU #37) is located in the western end of Building 45 along the east side of Gadsden Avenue approximately 1000 feet south of the Restricted Area (ASA) fence in the Utility Area. Although this SWMU is not within the ASA boundaries, it is within the scope of the ESI. The wash rack is designed with two wash bays and a water heating/steam generating unit. Kerosene fuel for the water heating unit is stored in an above ground tank located on the north side of the building.

One bay is used for general washing of depot vehicles, the other for steam cleaning operations. Waste waters from cleaning operations are collected through floor drains, pumped through an above ground oil/water separator and discharged to the sanitary sewer system. Oils and solids are collected in drums for disposal.

SECTION 3

SITE PHYSICAL CHARACTERIZATION

This section characterizes the physical setting of the Anniston Army Depot (ANAD). The Ammunition Storage Area (ASA) constitutes approximately 90% of the ANAD acreage. The discussion includes descriptions of the physiography, natural resources, ecology, climatology/meteorology, geology, and hydrogeology of the project site and vicinity.

3.1 PHYSIOGRAPHY

3.1.1 Regional Physiography

ANAD is located in the northeastern portion of Alabama in the southern portion of Calhoun County (see Figure 2-1). The County is located almost entirely within the Valley and Ridge physiographic province of the Appalachian Highlands (Fenneman, 1938). The Valley and Ridge physiographic province is characterized by sharply folded consolidated strata which tend to form northeastwardly trending, sub-parallel valleys and ridges. A small area in the eastern-most part of Calhoun County is located in the Piedmont physiographic province (see Figure 3-1).

3.1.2 Local Physiography

ANAD is located near the western end of the Weisner Ridge District of the Valley and Ridge physiographic province. Ground elevations range from about 600 feet to 1000 feet (National Geodetic Vertical Datum [NGVD]). ANAD is characterized by gently rolling wooded ridges and valleys. Streams draining the ASA are tributary to the Coosa River located approximately 15 miles west of the site.

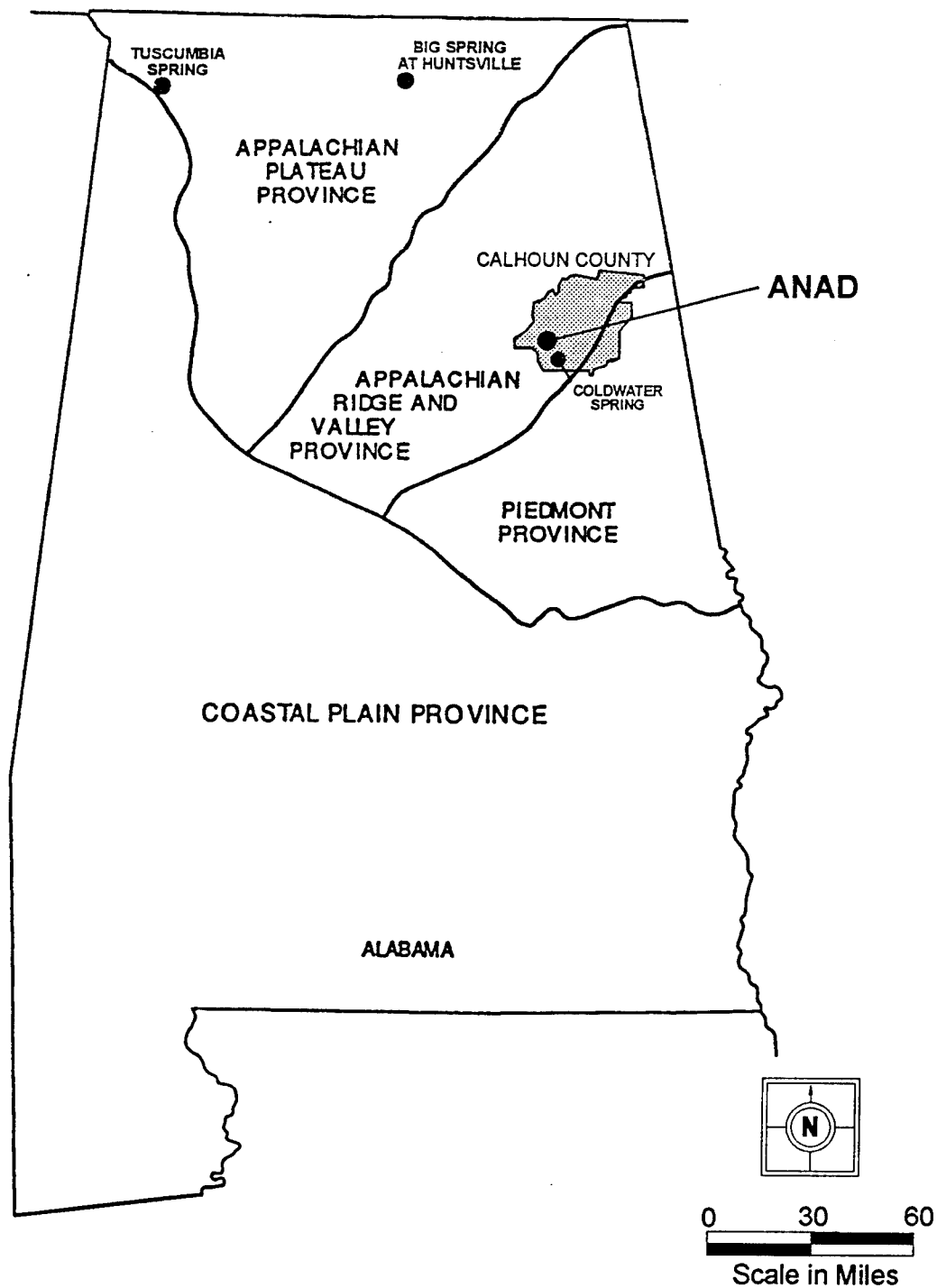


Figure 3-1
Physiographic Setting

Site: Anniston Army Depot
Ammunition Storage Area
Anniston, Alabama

Jacobs Project Number
35-G306-00

Drawn by: Lee Robertson
Date: 10/17/94

Task Manager Approval

Date

Project Manager Approval

Date



JACOBS ENGINEERING GROUP INC.

1212 NEW YORK AVE., SUITE 1050, WASHINGTON, D.C. 20005

Source: Geologic Survey of Alabama (1963)

3.1.3 Topography and Drainage

The topography of Calhoun County ranges from flat to gently rolling in the western part and is mountainous in the eastern part attaining elevations of approximately 2,100 feet NGVD at Choccolocco Mountain. Coldwater Mountain is the most predominant topographic feature immediately adjacent to ANAD and has a peak elevation of 1,709 feet NGVD. Elevations at ANAD range from near 600 feet to about 1,000 NGVD.

The County contains six major drainage basins. The largest is the Choccolocco Creek, which drains the extreme eastern and southern parts of the County. The stream flows south through a narrow valley bordered on the east by Bryner and Horseblock Mountains (southwestern Cleburne County) and on the west by Choccolocco Mountain (southeastern part of Calhoun County) and then westward to the Coosa River. Nances and Terrapin Creeks drain the extreme northeastern corner of the county and flow northward to the Coosa River. Cane, Chatchee, and Tallaseehatchee Creeks drain the area west of Choccolocco Mountain to the Coosa River. ANAD is located primarily in the Cane and Choccolocco watersheds.

3.2 NATURAL RESOURCES

3.2.1 Regional Natural Resources

Developed regional natural resources in the ANAD area include timber, iron ore, chert gravel, clay (mined), and water from Coldwater Spring. The mountains, forests, and streams in the area are used extensively for recreation. Recreation facilities include Logan Martin Lake near Pell City, approximately 15 miles west of the site. The lake is the impoundment above Logan Martin Dam on the Coosa River. Dry Creek, which extends along the southeast boundary of ANAD, has been classified as a fish and wildlife stream by the State of Alabama. The Talladega National Forest is located in the mountainous areas to the east and south of the site.



3.2.2 ANAD Natural Resources

Historically, ANAD has been the site of mostly unused forested land and agricultural operations. No mining activities have been reported on the project site, although iron ore mining has occurred in the Pelham Range and Cane Creek area (Warman and Causey, 1962).

One of the most significant natural resources at ANAD is timber. Logging of the abundant loblolly and longleaf pine forests located in the ASA has been practiced for years as a forestry management tool and for its economic benefit.

During the four decades that the ASA has been a restricted access area, wildlife populations have proliferated, generating the need for management of deer and wild turkey populations. Wildlife resources are controlled through periodic permitted hunting and trapping.

3.3 ECOLOGICAL EVALUATION

Regionally, the ASA lies in the transition zone between the Appalachian Valley and Ridge and the Piedmont physiographic province. This transition zone is typified by uneven terrain, with isolated conspicuous mountains and mountain ridges. The ASA exhibits topographic relief typical of the inter-mountain areas, with elevations ranging from greater than 1000 feet to less than 700 feet above mean sea level. The majority of the land cover in this physiographic transition zone is mixed deciduous-coniferous forest. The ASA is bounded to the north and east by woodland habitat (Fort McClellan), to the south by the industrial portions of the depot, to the southeast by the Southeast Industrial Area (SIA), and to the west by farmland. A 6-foot chain-link fence presents an entry/egress obstruction for wildlife.

Selected flora and fauna that constitute the biota of the immediate ASA area are listed in Appendix A. Additional lists of the flora and fauna of Calhoun County are provided in the Anniston Army Depot Installation Assessment (USTHAMA, 1978). Flora and fauna include trees and shrubs, and a broad inventory of vertebrates, including mammals, amphibians and reptiles, and resident and transient birds. The ASA is dominated by woodland habitat, and is managed in accordance with the current Anniston Army Depot Natural Resources Management Plan.

Woodland communities that predominate are a mixture of 50% pine (dominated by loblolly and longleaf), 25% hardwood (dominated by white oak, southern red oak, yellow poplar, and blackjack oak), and 25% pine/hardwood codominant. As with many plant communities, predominance is largely a function of fire frequency and intensity. Conifers, which are more tolerant of fire, dominate in drier areas and in areas subject to frequent burning. Hardwood species predominate in the areas of greater relief and in wetland areas and are especially prevalent where fire is infrequent.

The northwest portion of the ASA is mostly undisturbed woodland. Vegetation along the numerous roads throughout the ASA is primarily grass species, which are managed by periodic mowing. Vegetation in the areas around the ammunition storage igloos is composed mainly of broomsedge, dog fennel, pine seedlings, sweetgum, briar, and lespedeza and bermuda grasses. This vegetation is managed through application of various herbicides. Vegetation within the Chemical Munitions Storage area consists mainly of various grasses. Intensive management through mowing and the application of growth inhibitors maintains the grass at a height of 8 inches or less.

Resident indigenous large mammal and avian species include deer, fox, coyote, bobcat, rabbit, raccoon, opossum, turkey, quail, and dove. Waterfowl are not known to use any areas of the ASA. The Chemical Munitions Storage Area supports a resident deer population that is prevented from egress by the 8-foot-high double fencing that surrounds the area, and is managed by trapping and removal.

Although no federal or state-designated threatened or endangered species are known to occur in the ASA area, habitats at ANAD may be suitable for three endangered vertebrates observed in Calhoun County, and for a fourth, for which there are unconfirmed sightings at the ASA. Several areas at ANAD were determined by the US Fish and Wildlife Service (1979) to be forested with trees of adequate, though marginal, age and size classes for habitation by red-cockaded woodpeckers (*Picoides borealis*). At least one cave is present at the ANAD which may be suitable roosting habitat for the gray bat (*Myotis grisescens*) and the Indiana myotis (*Myotis sodalis*). There are no sightings of other evidence to substantiate possible presence of any of these animals. There have been reported sightings of dark-phased mountain lions (*Felis concolor*) by ANAD personnel, but none of these sightings has been confirmed. In addition, Dry Creek, which drains a portion of the SIA, joins Coldwater Creek downstream of ANAD. Coldwater Creek is designated as critical habitat for the pygmy sculpin, a small fish which is listed as a threatened species.

A tributary of Cane Creek which exits the ASA to the north represents the most conspicuous surface drainage feature. Two perennial streams and several intermittent streams that feed this tributary drain the north and central portions of the ASA. Several intermittent streams also drain the southwest and southeast portions of the ASA, flowing into the Eastaboga Creek system and the Dry Creek system, respectively. The invertebrate biota present in Cane Creek are listed in Appendix A, along with the aquatic species that have been observed in other local aquatic communities (Dry Creek, Coldwater Creek, and Coldwater Spring) and may occur in the streams at the ASA. Various minnows are the only fish species known to occur in Cane Creek. Except for flood incidents, larger species are probably excluded due to the small size of this creek. Aquatic environments at the ASA also include several manmade ponds of one-quarter acre or less. They probably contain various minnows, catfish, and sunfish.

Wet areas and wetland-type areas are common in hollows along intermittent streams in the ASA, particularly in the northwestern and eastern portions. Vegetation in these areas is dominated by alder, witch hazel, Carolina willow, water oak, willow oak, persimmon, dogwood, black willow, needle rush, and typical wetland species.

3.4 CLIMATOLOGY/METEOROLOGY

3.4.1 Regional Climatology/Meteorology

The ANAD area has a moist, temperate climate with an average annual rainfall of 53.25 inches. During the period from December through March, rainfall is the heaviest, with March having the greatest precipitation, approximately 7 inches on average. The driest period is from June through October. October, which averages 2.50 inches is the driest month. Average monthly rainfalls for the Anniston area are shown in Table 3-1.

Table 3-1. Monthly Rainfall, Temperature & Wind Speed at ANAD

MONTH	AVERAGE PRECIPITATION (INCHES)	AVERAGE TEMPERATURE (°F)	AVERAGE WIND SPEED (MPH)
JANUARY	5.36	47.9	8.2
FEBRUARY	4.82	54.7	8.8
MARCH	6.82	56.9	8.1
APRIL	5.35	60.8	8.3
MAY	3.99	68.5	6.8
JUNE	3.89	77.8	6.1
JULY	4.23	79.4	5.7
AUGUST	3.80	81.9	5.5
SEPTEMBER	4.15	75.6	6.4
OCTOBER	2.50	61.6	6.2
NOVEMBER	3.35	53.8	7.3
DECEMBER	4.99	49.5	7.8

Source: NOAA, 1988—1990, State of Alabama, Climatological Data Annual Summary, 1990

The mean maximum temperatures for the Anniston area in January and July are 47.9 degrees Fahrenheit (°F) and 79.4°F, respectively. The U.S. Weather Bureau recorded temperature extremes of (-3)°F and 105°F for this area (ESE, 1989). Average monthly temperatures for the Anniston area are shown in Table 3-1.



Seasonal winds for the area are approximately 7 mph on the average. From March through August, the prevailing wind direction is from the south-southwest and will change direction to north-northwesterly in the fall and winter months. Average monthly wind speeds are shown in Table 3-1.

3.4.2 ANAD Climatology/Meteorology

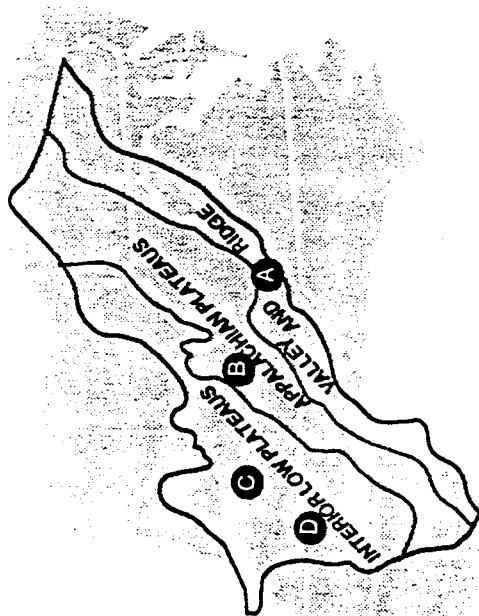
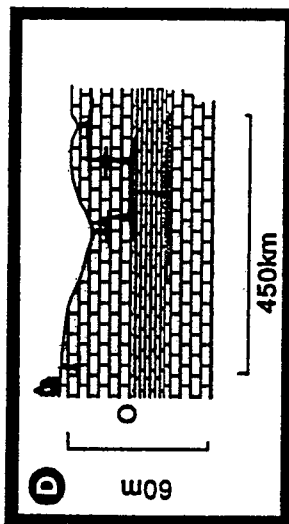
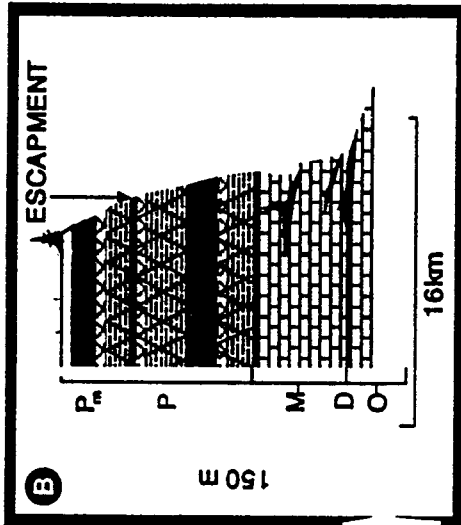
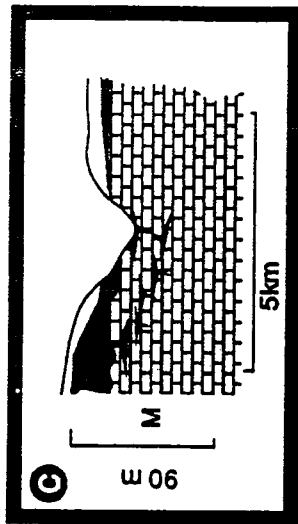
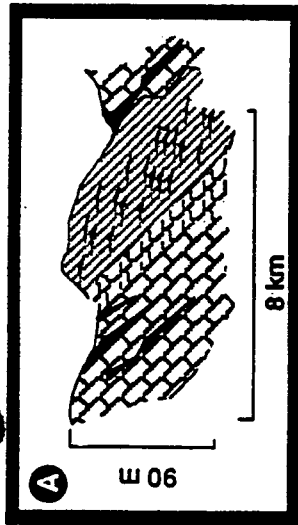
Meteorological data collected on site during the field investigations (from October 1, 1991 to February 29, 1992) include the daily precipitation, temperature and wind direction. Recorded precipitation data show rainfall accumulation to be the greatest during the month of February, with an approximate rainfall total of 6.31 inches. In the month of October, precipitation is minimal, averaging only 0.20 inches of rainfall. Average monthly temperature during this period was recorded at 61.6°F. Wind direction is generally from the north-northwest, changing periodically, for short periods, to south-southwesterly.

3.5 REGIONAL GEOLOGY AND HYDROLOGY OF THE ANAD AREA

3.5.1 Geologic Setting

Anniston Army Depot lies within the Alabama sector of the Appalachian Valley and Ridge geologic province. This province is represented by a long, narrow, curving band of geologic structures that extends from Newfoundland, Canada to central Alabama, United States. This province is subdivided into three hydrogeologically defined subregions. These subregions include (from east to west) the Valley and Ridge, the Appalachian Plateaus, and the Interior Low Plateaus (see Figure 3-2).

The Appalachian Plateaus and Valley and Ridge subregions encompass two major tectonic domains that include the southern extent of the Appalachian basin and the southeastern part of the Eastern Interior Basin.



CONCEPTUAL SITE MODELS A, B, AND D MODIFIED FROM A. ZIMOWSKI (1978);
 CONCEPTUAL SITE MODEL C MODIFIED FROM J. V. BEAUMAIS AND M. W. BRADLEY (1986a);
 CONCEPTUAL SITE MODEL E MODIFIED FROM J. V. BEAUMAIS AND M. W. BRADLEY (1985)

CONCEPTUAL SITE MODELS NOT
 TO SCALE

GEOLOGIC AGE CODES

K Cretaceous
 Rn Permian
 P Pennsylvanian
 M Mississippian
 D Devonian
 O Ordovician
 -C Cambrian

LEGEND

Groundwater Occurrence
 Regolith
 Limestone
 Dolomite
 Chert
 Shale
 Sandstone And Conglomerate

GEOLOGIC PROVINCES AND HYDROGEOLOGICAL MODELS APPALACHIAN REGION	JACOBS PROJECT NO.
	35-0306-00
SITE NAME/LOCATION ANNISTON ARMY DEPOT ANNISTON, ALABAMA	FILE NO. 3-2
JACOBS ENGINEERING GROUP INC.	DRAWN BY: DK DATE: 04/26/92
	CHECKED BY: JL DATE: 04/26/92

Geology of the area around ANAD consists of Cambrian to Pennsylvanian age indurated sedimentary rocks that are exposed in long narrow belts of northeast trending ridges and valleys (Seaber, 1988). The ridges are generally underlain by folded and faulted resistant sandstones, cherty limestones and dolomites, and conglomerates. These rock types are generally less susceptible to weathering and erosion due to high quartz content in the rock formations. The valleys are typified by non-resistant limestones, shales, and dolomites that weather rather easily in a rainy humid climate. Flanks of the ridges are underlain by moderately resistant rocks that include siltstones and shales. Regionally, the ridges are underlain by the resistant silicious rocks of the Weisner Formation. Figure 3-3 shows the geology in vicinity of ANAD.

Coldwater Mountain is an uplifted anticlinorium comprised of the resistant Weisner Formation (Osborne and Szabo, 1984). In the vicinity of ANAD, however, the topographic highs are underlain by the Copper Ridge Dolomite (Knox Group). The Conasauga Formation forms topographic lows (ESE, 1982). Drilling cores collected from both rock units are practically indistinguishable. Both of these dolomites exhibit similar frequencies and distributions of fractures and solution cavities, and are hydrogeologically very similar (ESE, 1982). One characteristic that distinguishes the dolomites from one another is the high silica content of the Copper Ridge Formation of the Knox Group.

ANAD lies on the margin of a widespread distribution of carbonate rocks within a high rainfall area of the United States. Under such climatic conditions, karst topography may form in areas underlain by soluble carbonate strata. Aside from a sinkhole-like depression along the eastern ASA boundary (see Section 2.4.1) and a cave reported in the southwest portion of ANAD, no other karst-type topographic expressions were recognized during the 1991-1992 RI activities (Jacobs, 1991).

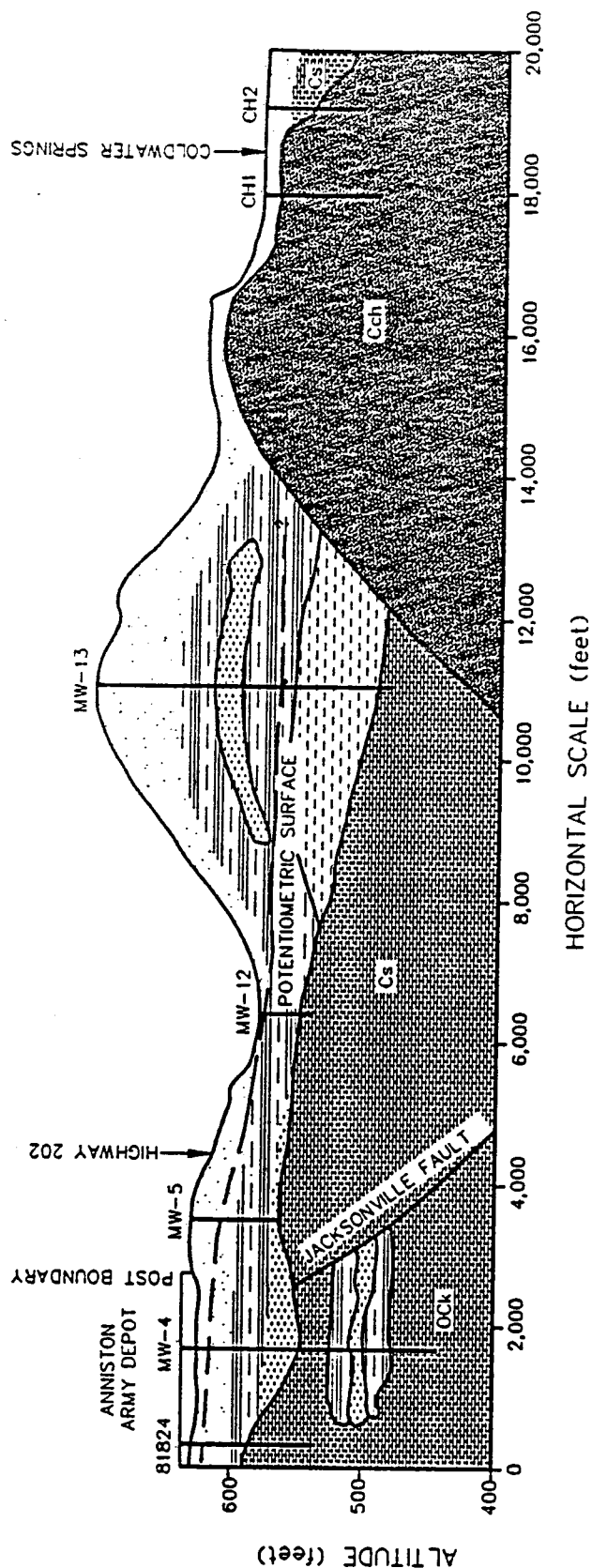


Figure 3-3
Geologic Profile of
the ANAD Vicinity

SOURCE:
ESE, 1988

Site: Anniston Army Depot Ammunition Storage Area Anniston, Alabama	Jacobs Project Number 35-G306-00	
	Drawn by: Lee Robertson Date: 11/10/94	
Task Manager Approval	Date	Project Manager Approval
<div>JE</div> JACOBS ENGINEERING GROUP INC. 1212 NEW YORK AVE., SUITE 1050, WASHINGTON, D.C. 20005		

3.5.2 Structural Setting

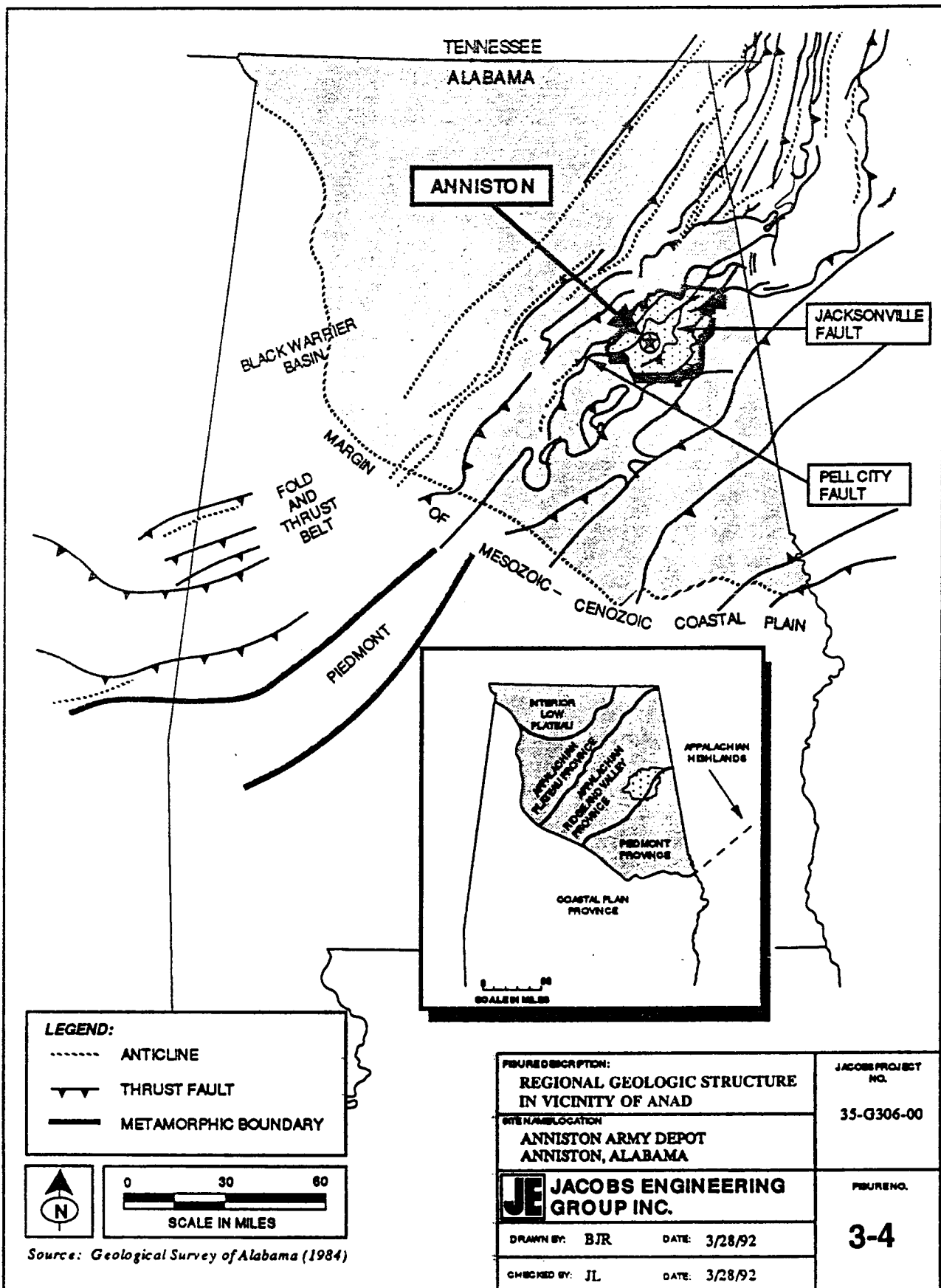
The northeast boundary of ANAD is bound by the regional Pell City Fault. The Jacksonville Fault is a major but not regional thrust fault that Osborne and Szabo (1984) defined as lying adjacent to the southeast boundary of the ANAD (Figure 3-4). The Jacksonville Fault is a northeast trending southwest dipping low angle thrust fault that has been defined by Osborne and Szabo as a major splay fault of the more regional Pell City Fault.

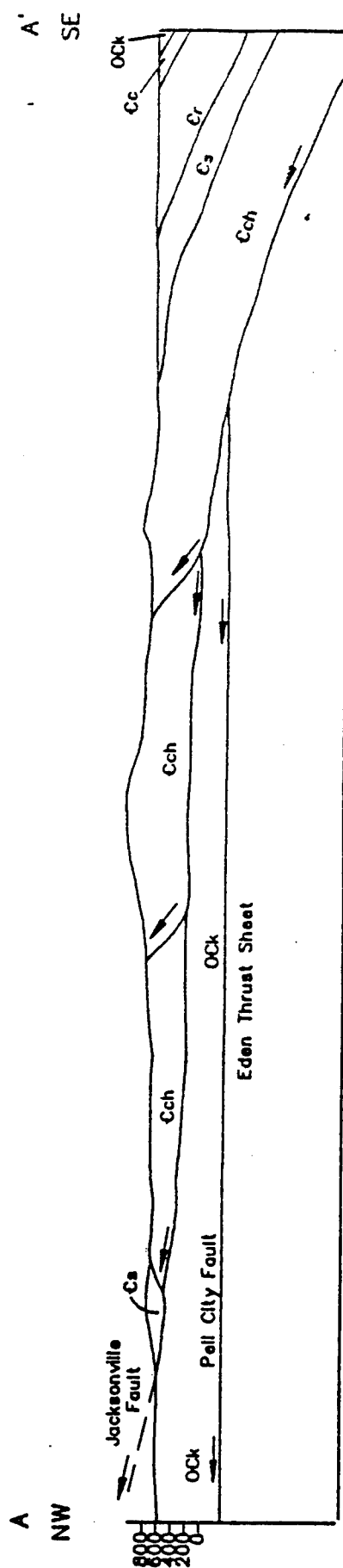
The sedimentary rocks found in the subsurface are tilted and thrust faulted into a series of disharmonic sheets which were regionally thrust from several kilometers west or northwestward (see Figure 3-5). The geologic structure is expressed in the northern portion of the Valley and Ridge subregion by extensive folding, whereas in the southern region, thrust faults dominate.

Osborne and Szabo (1984) state in their report on the stratigraphy and structure of the Jacksonville Fault:

- Recent seismic profiling in other areas of the Appalachian fold and thrust belt documents that most of the thrust faults dip to the southeast...Northwestward transport of the paleozoic sequence along the thrust faults has resulted in the imbricate stacking of large slabs of rock referred to as thrust sheets or panels. Within an individual thrust sheet, smaller faults may splay off the larger thrust fault that bounds the lower surface of the thrust sheet, resulting in the imbricate stacking of rocks within the thrust sheet.

Boring log information indicates that in areas south of the Jacksonville Fault trace, older consolidated rocks of the Cambrian Conasauga and Rome Formation, Shady Dolomite, and the Chilhowee Group have been thrust up onto rocks of the younger Ordovician and Cambrian Knox Group. Tremendous tectonic energy dissipated by the intense thrust faulting of the regional Pell City and secondary Jacksonville splay fault caused extensive secondary stress that resulted in numerous high angle faults in the area around ANAD. At various locations within the southern region of the Valley and Ridge, faults are so closely spaced that no intervening folds are preserved (Seaber, 1988).





EXPLANATION

Ock = Knox Group, undifferentiated
Cc = Conasauga Formation
Cr = Rome Formation
Cs = Shady Dolomite
Cch = Chilhowee Group

Ec - Conasauga Formation

Cr = Rome Formation

E9 - Shady Dolomite

Cch - Chilhowee Group

Thrust fault, arrow shows relative movement, dashed where projected

No Vertical Exaggeration

**1000
feet**

1000
feet

SCALE

NOTE:

Cross section includes fault splays interpreted from lineaments.

FIGURE DESCRIPTION

DIAGRAMMATIC GEOLOGIC CROSS SECTION OF
SOUTHWEST END OF COLDWATER MOUNTAIN

**JACOBS ENGINEERING
GROUP INC.**

JACOBS
PROJECT
NO.

1 SITE NAME/LOCATION
2 ANNISTON ARMY DEPOT
3 ANNISTON, ALABAMA

FIGURE NO.

Additional relevant information has been provided by field work which is currently being conducted in the ANAD area to relocate a road and pipeline. The construction contractor has uncovered evidence that rock fracturing and normal faulting has occurred more frequently than previously documented in areas north of Coldwater Spring (personal communication, USGS Alabama Region, 1992).

3.5.3 Lithology of Region Around Jacksonville and Pell City Thrust Faults

The lithologies affected by the Jacksonville and Pell City Faults are the Cambrian age rocks of the Chilhowee Group, Conasauga Formation, and the younger undifferentiated Knox Group (Osborne and Szabo, 1984.) The major rock formations mapped within the Jacksonville and Pell City Faults are described below in detail from oldest to youngest age. Figure 3-6 depicts the stratigraphy of the region near the Jacksonville and Pell City Faults.

3.5.3.1 Chilhowee Group. The Lower Cambrian Chilhowee Group consists of four formations: the Cochran, Nichols, Wilson Ridge, and Weisner Formations (from oldest to youngest age, respectively). These formations have been mapped and subdivided based on the relationship of their coarse-grained and fine-grained clastic components. In the study area that encompasses the ANAD facility, the Chilhowee Group has not been differentiated into its various formations. The coarse grained facies are comprised of primarily vitreous quartzite and friable, fine to coarse-grained ortho-quartzite sandstone, which are locally conglomeritic. In minor occurrences, micaceous shale and mudstones are found. The predominance of quartzite and sandstone within the area under study suggests a lithologic assignment of this rock type to the Weisner Formation. In addition, interbedded coarse and fine-grained rocks that have been noted within the local region indicate the occurrence of the Wilson Ridge Formation. A complete section of the Weisner Formation exists in Cherokee County, Alabama. In that section the Weisner Formation is 492 feet thick and the Wilson Ridge Formation is 604 feet thick. It is believed that although complicated by the presence of structural deformation, the thicknesses of the

Weisner and Wilson Ridge Formations are comparable in the ANAD area to those mapped in the section found in Cherokee County (Osborne and Szabo, 1984).

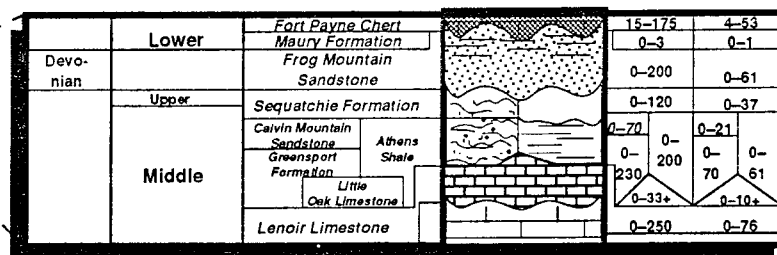
3.5.3.2 Shady Dolomite. The Lower Cambrian Shady Dolomite overlies the Chilhowee Group as mapped within the structural zone of the Jacksonville Fault. This unit is approximately 500 feet thick and, where exposed, is composed of light-gray, argillaceous to sandy, laminated dolostone and dolomitic limestone. Around the Anniston area, the Shady Dolomite consists of a compact mass of yellow-brown clay containing yellowish brown porcelaneous chert that weathers to a lacey "boxwork" texture (Osborne and Szabo, 1984).

3.5.3.3 Rome Formation. The Lower Cambrian Rome Formation overlies the Shady Dolomite Formation in the Jacksonville Fault region. It is comprised of clastic rocks that include mudstones, siltstone, sandstone, with interbeds of dolostone. In the Jacksonville thrust fault locality, the Rome Formation is approximately 1,000 feet thick.

3.5.3.4 Conasauga Formation. The Rome Formation within the study area is overlain by the Middle to Upper Cambrian Conasauga Formation. The Conasauga consists of thin bedded pale-olive mudstones, shaley mudstones, and shale, with local interbeds of limestone and rare siltstone. The limestone interbeds increase in thickness from the northeast to the southwest near the ANAD facility. The thickness of the Conasauga Formation around ANAD is approximately 100 feet.

3.5.3.5 Knox Group. The Upper Cambrian and Lower Ordovician Knox Group overlies the Conasauga Formation in the study area. The rocks of the Knox Group consist of a thick sequence of light to medium gray, fine to medium crystalline, variably bedded, laminated siliceous dolostone that weathers to a chert residuum (Osborne and Szabo, 1984). Within the Knox Group are also included rocks of the Copper Ridge and Chepultepec Dolomites. Because of poor exposure, however, the stratigraphy of the Knox in the ANAD area is not well understood. A complete section of the Knox is not exposed in the region, therefore the thickness is not known.

SYSTEM	SERIES	GROUP FORMATION, AND MEMBER	LITHO- LOGY	THICKNESS (feet)	THICKNESS (meters)
Pennsylvanian	Lower	Pottsville Formation		300+	91+
		Parkville Formation		1269	387
Mississippian	Upper	Floyd Shale		1200-2000	366-610
Devonian	Lower	Fort Payne Chert		15-175	4-53
		Maury Formation		0-3	0-1
	Upper	Frog Mountain Sandstone		0-200	0-61
		Sequatchie Formation		0-120	0-37
	Middle	Calvin Mountain Sandstone		0-70	0-21
		Greensport Formation		0-230	0-70
		Athens Shale		0-70	0-21
		Little Oak Limestone		0-33+	0-10+
		Lenoir Limestone		0-250	0-76
Ordovician	Lower	Newala and Longview Limestones		660	201
		Chepultepec Dolomite		3150	960
	Upper	Copper Ridge Dolomite		1245	380
Cambrian	Middle	Conasauga Formation		1900	579
	Lower	Rome Formation		700-1000	213-305
		Shady Dolomite		370-600	113-183
		Welsner Formation		1738+	492
		Wilson Ridge Formation		503	150
		Nichols Formation		410	125
		Cochran Formation		233+	71+



(ENLARGED SECTION)

FIGURE DESCRIPTION:

REGIONAL STRATIGRAPHY NEAR
THE ANAD FACILITY

SITENAME/LOCATION

ANNISTON ARMY DEPOT
ANNISTON, ALABAMA



JACOBS ENGINEERING
GROUP INC.

DRAWN BY: DJK

DATE: 4/20/92

CHECKED BY: TG

DATE: 4/20/92

JACOBS PROJECT NO.

35-G306-00

FIGURE NO.

3-6

3.5.4 Soils

Soils of Calhoun County were classified and mapped by the U.S. Department of Agriculture in the late 1950's. These soils are classified according to parent materials from which they are derived and the characteristics of their natural soil horizons occurring within approximately 5 feet of the surface. Soils of the Clarksville-Fullerton group are mapped throughout most of ANAD. Decatur-Cumberland soils are found in the southern extremities of the Depot and in the eastern portion of the Southeast Industrial Area.

Clarksville-Fullerton soils are developed in the residuum of cherty limestone. These soils are shallow, well-drained, dark brown to yellowish-brown stony loams to cherty clay loams and are highly susceptible to erosion. Chert and limestone inclusion from 3 inches to 8 inches in diameter occur commonly on the surface or within the soil profile. The permeability of these soils is from 2 to 10 inches per hour. The soil average pH range is from 4.5 to 5.4.

Decatur-Cumberland soils occur on transitional upland areas and are developed in residuum of underlying limestone and ancient valley fills of limestone residuum detritus. They are fine-textured, well-drained, deep, dark reddish-brown to dark red, loam to silty clay loam. Decatur-Cumberland soils are highly susceptible to erosion on steeper slopes. The permeability of these soils is from 0.8 to 2.0 inches per hour. The soil average pH range is 4.5 to 5.4.

3.6 REGIONAL HYDROGEOLOGY

Topography influences the hydrogeology within the local region and plays a significant role at ANAD. Field studies conducted in humid regions have found that water tables in unconfined aquifers usually have the same general shape as the surface topography (Fetter, 1988). This is explained by the fact that recharge takes place in topographically high areas and has a greater potential energy than recharge occurring in topographically lower areas. The higher energy is reflected in the higher elevations of the water table at these locations. During the recent field investigation, water levels were measured and groundwater elevations were calculated.

The carbonate rocks (limestones, dolomites) and shales of the Middle to Upper Cambrian Conasauga Formation and undifferentiated Knox Group form some of the most transmissive aquifers of this subregion of the Valley and Ridge province. Compared to the more prolific regional aquifers of North America, aquifers in this area yield less water to wells. While it is important to note that some of these aquifers are highly permeable and porous on a local to subregional scale, few are permeable on a regional scale of hundreds to thousands of kilometers (Seaber, 1988).

Within this subregion, groundwater flow paths are typically relatively short, commonly extending no more than several tens of kilometers in their longest dimension. The rock units of the area that includes ANAD have little primary porosity. The permeability of the indurated Cambrian rocks is secondary and in general, the permeability decreases with depth.

Most of the large springs and high yield wells in the area are associated with significant subareal flow channels that include cavities, fractures, and faults within the rock units. The surface residuum, which can be characterized as the weathered by-product of the Knox Group, has variable transmissivity limiting the development of high yield wells. Structurally, this region has been affected by extensive folding and faulting. The existence of folds and faults that characterize the Valley and Ridge province contribute significantly to the present lack of understanding of the hydrogeologic conditions and potential subsurface transport pathways.

3.6.1 Regional Groundwater Flow

The groundwater flow systems of the ANAD area are controlled by an exceedingly complex geologic structure. The complex nature of the geology is represented by many semi-isolated hydrogeologic units that are characterized by jointing, fracturing, faulting, and possible solution cavities.



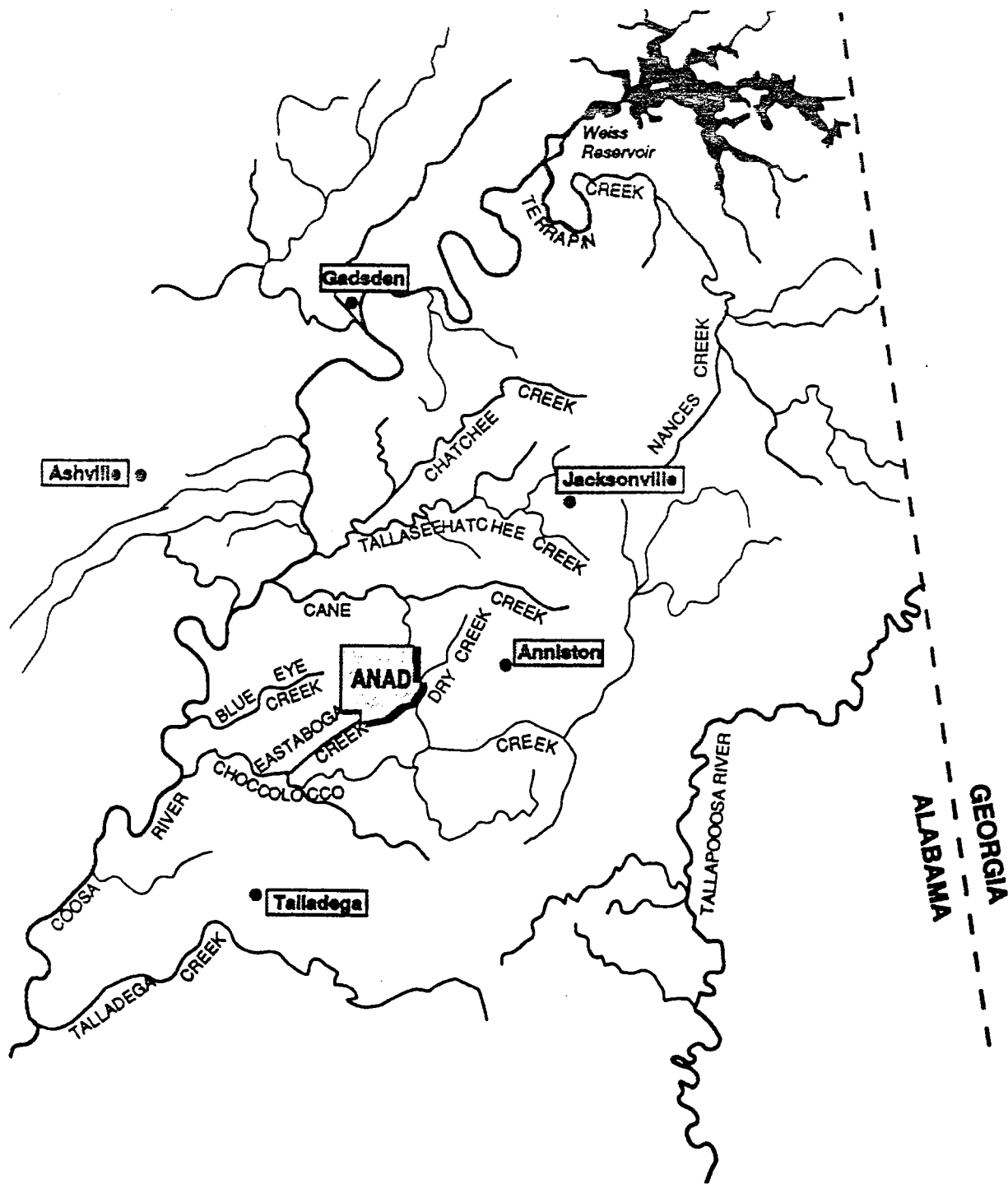
The groundwater aquifer in the ANAD area is discussed as a number of strata that possess similar hydraulic characteristics such as hydraulic potential, response to rainfall, permeability, and lithology. The four hydrogeologic layers that were described previously support these hydrologic distinctions on a local scale. Regionally, the groundwater aquifers consist of a shallow zone comprised of low permeability sandy, clayey silt, which is approximately 20 to 40 feet thick; and a deep zone comprised of low to high permeability sand and gravel sediment above weathered bedrock. The weathered bedrock zone is at the top of competent bedrock that has an approximate thickness of 1000 feet (Osborne and Szabo, 1984).

Regionally, the potentiometric surface of the shallow groundwater system in the unconsolidated residuum tends to resemble the topography (as expected in humid climate regions). In contrast, the deep potentiometric surface of the bedrock aquifer is influenced more by fracture systems and the regional gradient. Differences in hydraulic potentials indicate that the shallow groundwater system is not always isolated and leakage between the shallow and deep systems is common.

3.6.2 Surface Water Hydrology

Surface water runoff at ANAD is controlled by three prominent drainage divides. Surface water at ANAD flows into three major streams: Cane Creek to the north, Blue Eye Creek to the west, and Choccolocco Creek to the south. All of the streams draining ANAD eventually flow into the Coosa River, which lies west of the depot (see Figure 3-7).

Dendritic drainage patterns are predominant in the area. Straightened drainage channels and pseudo-trellis drainage patterns are apparent in areas of the depot where construction of roadways and buildings has taken place.



Source: Adapted from ESE, 1988a


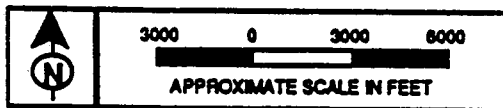
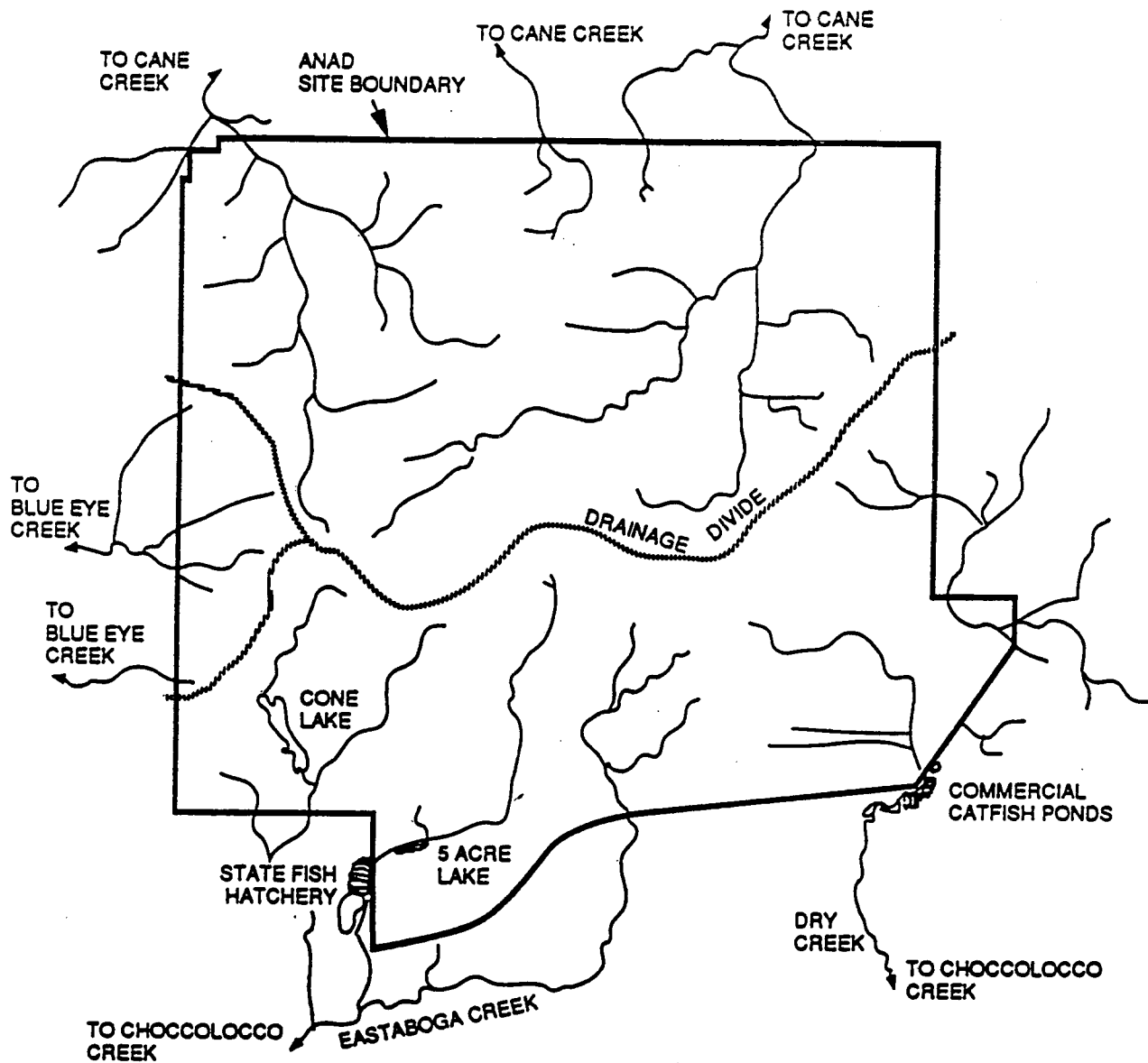
FIGURE DESCRIPTION: REGIONAL SURFACE WATER FEATURES		JACOBS PROJECT NO. 35-G306-00
SITE NAME/LOCATION ANNISTON ARMY DEPOT ANNISTON, ALABAMA		
 JACOBS ENGINEERING GROUP INC.		FIGURE NO. 3-7
DRAWN BY: DJK	DATE: 5/4/92	
CHECKED BY: TG	DATE: 5/8/92	


Figure 3-8 illustrates surface water drainage patterns and drainage divides on ANAD. As shown, a pronounced drainage divide bisects the depot from the east-central boundary to the southwest boundary. To the north of the divide the drainage flows into Cane Creek, whereas the southern drainage flows into the Choccolocco Creek system. North of the divide, a series of small drainageways exit the depot along the west-central boundary and flow westward to the Coosa River. The remainder of the drainage flows north into the Pelham Range, which is a part of the Fort McClellan Military Reservation. All drainage leaving the depot south of the divide flows onto private land (USATHAMA, 1978).

The average flow of streams in the area varies throughout the year. Daily flow rates respond not only to precipitation events but also to base flow contributions. Approximately one-third of the annual precipitation contributes to evaporation and transpiration processes. The remaining two-thirds are available for surface water runoff and groundwater infiltration.

Lakes and ponds in the immediate vicinity of ANAD occur south of the Choccolocco Creek divide. Two artificial lakes, Cone Lake and 5-Acre Lake, lie within the ANAD boundary and are used for recreational purposes. Twenty-four smaller (1/4 acre) ponds are located throughout ANAD. These are used for fire protection.



Source: ESE, 1988

FIGURE DESCRIPTION: SURFACE WATER FEATURES ON ANAD		JACOBS PROJECT NO. 35-G306-00
SITE NAME/LOCATION ANNISTON ARMY DEPOT ANNISTON, ALABAMA		FIGURE NO. 3-8
 JACOBS ENGINEERING GROUP INC.		
DRAWN BY: BJR	DATE: 4/29/82	
CHECKED BY: JL	DATE: 4/29/92	

SECTION 4

FIELD INVESTIGATIONS

The expanded site inspection (ESI) of the Anniston Army Depot (ANAD) Ammunition Storage Area (ASA) was performed to determine whether there is sufficient evidence of contaminant release within the ASA solid waste management units (SWMUs) to warrant further investigation. Specific investigations that were conducted and their results are discussed on a SWMU-by-SWMU basis in Section 5.

4.1 CONDUCT OF INVESTIGATIONS

Field investigations were conducted during the period January through May 1992. The work involved records searches, geophysical surveys, soil borings, well installations, and sampling of groundwater, surface waters, soils, and sediments for laboratory analyses.

The field investigation sample locations for each SWMU were based on the design presented in Section 5 of the ESI Work Plan (Jacobs 1991). In some instances, sample locations were modified to reflect site evaluation by the Jacobs on-site hydrogeologist of SWMU topography, geologic and surface soil observations, drainage patterns, and other field conditions. The sampling program at some SWMUs was modified because of limitations on access due to concerns about the presence of explosives or chemical hazards. Further modification of the Work Plan sampling design was required where well drilling or soil borings could not be completed because of geologic impediments that were encountered during drilling.

A hollow-stem auger rig was used to drill borings to collect subsurface soil samples. In some instances where drilling conditions precluded completion of planned borings, subsurface soil samples were not collected. Borings successfully drilled to the water table were completed as monitoring wells. Sediment samples were collected at locations determined in the field during the investigation, where a preferential drainage path was located or a stream flowed adjacent to a SWMU. Surface soil samples were collected by taking and homogenizing a 6-inch deep plug of



were installed. A detailed description of the sampling design is presented in the Work Plan. Field boring logs are presented in Appendix B.

4.2 SPECIAL SURVEYS

In December 1991, surface geophysical surveys were performed by Technos, Inc. at SWMUs #8, #16, #17, #26, and #27 to locate their exact boundaries. The survey conducted at the presumed location of SWMU #8 did not delineate the Acid Disposal Pit. Surveys conducted at SWMUs #26 and #27 successfully defined their boundaries. At the remaining SWMUs, typical conductivity values were encountered with no unusual features generally identified. A detailed description of the geophysical survey results is presented in Appendix C.

Unexploded ordnance (UXO) surveys were conducted at SWMUs #16 and #17. Both SWMUs were surveyed and cleared by UXB, International, Inc., using a magnetometer. In addition to these UXO surveys, soil collected from soil borings at SWMUs #10, #11, and #14 was screened by UXB for the presence of TNT and RDX. A detailed description of the UXO survey and TNT and RDX testing results is presented in Appendix C.

4.3 SAMPLING AND ANALYSIS

The selection of analyses that were performed on the collected samples is described in the ESI Work Plan. As detailed in that document, the analytic requirements were based upon a review of historic records and previous investigations that documented the historic patterns of activity, including SWMU purpose and function, chemicals used, and any waste disposal practices. The number, type, and location of sampling points, and recommended analyses were also based upon assumed behavior of any contaminants that could be inferred from ANAD records and prior investigations and reports.



4.4 QUALITY ASSURANCE

Installation of monitoring wells was generally in accordance with Section 6.9 of the Quality Assurance Program Plan (QAPP). Field adjustments from the Work Plan were necessary for the installation of some wells due to shallow depths at which groundwater was encountered. Appendix D describes the well installation modifications.

Sampling was conducted in accordance with appropriate sections of the QAPP: Section 6.8.2 for soil borings, Section 6.8.1, surface soil; Section 6.12, surface sediment; Section 6.10, groundwater; and Section 6.11, surface water.

Field investigations and laboratory analyses were conducted in accordance with procedures specified in the QAPP for sample collection, management, custody, equipment use and maintenance, and laboratory analytical methods. Only quality-level III data were used to support evaluations and recommendations that have been made in this report.

As required by Section 10.0 of the QAPP, data management was performed by carefully following chain of custody, data reduction, validation, and reporting procedures.



SECTION 5

INVESTIGATIONS AND RESULTS

Completion of the Expanded Site Inspection (ESI) of the Anniston Army Depot (ANAD) Ammunition Storage Area (ASA) entailed document reviews, geophysical investigations, and collection of surface soil, sediment, soil boring, surface water, and groundwater samples. Samples were subjected to laboratory analysis as reported throughout this report. This section of the ESI discusses the field investigations that were conducted and presents their results. All analytical results are presented in Appendix F. Procedures used to validate the ESI data and results are described in Appendix E.

Inorganic analytes are naturally occurring in soils, and organic compounds generally are not (with the exception of trace levels produced by the metabolic activity of soil microorganisms). Therefore, the presence of organic compounds in the environment at concentrations above the certified reporting limit (CRL) are considered, in this report, indicative of potential contamination. The presence of inorganic analytes at concentrations above the naturally occurring levels are also indicative of potential contamination. Samples were collected within the ASA to evaluate the naturally occurring values of inorganics, and are referred to as the control samples. A discussion of the control screening value selection criteria and development of these levels is presented in Section 5.1. A discussion of comparisons to the field data sets of control values is presented in Section 5.2. Section 5.3 presents a summary of field investigations conducted and results.

5.1 CONTROL SAMPLES

Selected sample locations within the ASA were used to determine control screening values using the following criteria:

- Sample locations are within the ASA.
- Sample locations were up-gradient of potential sources of contamination.
- Samples each had a "full scan" of the inorganics on the Target Analyte List (TAL) from the 1991-92 field investigations.
- Analytical results showed no obvious indications of contamination in the TAL analytes or in any other analytical result, for any medium. (Total organic carbon [TOC] and nitrate/nitrite in the absence of other contaminants are assumed to be naturally occurring and not indicative of contamination)



Samples selected as control samples for each medium were:

- Groundwater: W2-17, 91B18, 91B18D
- Sediment: S8SD1, S8SD2, S8SD3, S8SD3D, S8SD4
- Surface Soil: S10S01, S26S02, S27S02
- Subsurface Soil: 91B17, 91B18

Tables 5-1 through 5-4 present analytical results of samples collected from each medium to be used in the determination of control values for screening potential contamination. (Surface water has not been assessed because only one sample was collected during the ESI.) Each table presents the inorganic certified reporting limits (CRLs) and the sample data. Sample data were averaged, and the average was doubled to attain each inorganic analyte's control screening value. For Table 5-1, Groundwater Control Samples, maximum contaminant levels (MCLs) were also included in the assessment. Where twice the average was greater than the MCL, the value selected as the control screening value was the greater of the MCL or the average. For values reported as being less than the detection limit (identified with a "<"), the average was calculated using the value at the detection limit, according to EPA recommendations (EPA 1989).

Table 5-1. Groundwater Control Samples

ELEMENT/ COMPOUND	CRL*** (µg/l)	MCL (µg/l)	W2-17 (µg/l)	91B18 (µg/l)	91B18D (µg/l)	CONTROL SCREENING VALUE			
						Avq.	2' Avg.	Use	Comment
Figure No.			5-1	5-8	5-8				
Aluminum	107		591	14,400	13,700	9,564	19,127	19,127	2xAvg.
Antimony	37.1	6	<37.1	<37.1	<37.1	37.1	74.2	37.1	Avg.>MCL
Arsenic	6.01	50	<6.01	<6.01	<6.01	6.01	12.02	50	MCL
Barium	20	2,000	51.4	219	230	167	334	2,000	MCL
Beryllium	2.5	4	<2.5	<2.5	<2.5	2.5	5	4	MCL
Cadmium	5	5	<5	<5	<5	5	10	5	MCL
Calcium	500		38,400	6,320	6,170	16,963	33,927	33,927	2xAvg.
Chromium	15	100	<15	54.9	42.7	38	75	100	MCL
Cobalt	25		<25	28.4	33.5	29	58	58	2xAvg.
Copper	20	1,300**	<2.0	23.1	23.1	22	44	1,300	MCL
Cyanide	8.17	200	<8.17	<8.17	<8.17	8.17	16.34	200	MCL
Iron	120		2,220	58,000	57,000	39,073	78,147	78,147	2xAvg.
Lead	1.26	15**	5.12	23.8	29	19	39	19	Avg>MCL
Magnesium	500		3,790	1,590	1,470	2,283	4,567	4,567	2xAvg.
Manganese	5.11		469	2,800	2,900	2,056	4,113	4,113	2xAvg.
Mercury	0.74	2	<0.74	<0.74	<0.74	0.74	1.48	2	MCL

Anniston Army Depot, Alabama

Expanded Site Inspection of the Ammunition Storage Area

Table 5-1. (Continued)

ELEMENT/ COMPOUND	CRL ^{***} (µg/l)	MCL (µg/l)	W2-17 (µg/l)	91B18 (µg/l)	91B18D (µg/l)	CONTROL SCREENING VALUE			
						Avg.	2 nd Avg.	Use	Comment
Molybdenum	30.9		<30.9	<30.9	<30.9	30.9	61.8	61.8	2xAvg.
Nickel	63.1	100	<63.1	<63.1	<63.1	63.1	126.2	100	MCL
Potassium	1,250		12,300	<1,250	<1,250	4,933	9,867	9,867	2xAvg.
Selenium	14.9	50	<14.9	<14.9	<14.9	14.9	29.8	50	MCL
Silver	12.5		<12.5	<12.5	<12.5	12.5	25	25	2xAvg.
Sodium	500		2,770	3,320	3,340	3,143	6,287	6,287	2xAvg.
Thallium	2.5	2	<2.5	<2.5	<2.5	2.5	5	2.5	Avg.>MCL
Vanadium	20		<20	44.5	42.5	36	71	71	2xAvg.
Zinc	13		426	540	491	486	971	971	2xAvg.
Other Analyses									
Nitrate/Nitrite	1.00 [*]		N/A	29.6	24.7	27.1	54.3	54.3	2xAvg.
TOC	1 [*]		N/A	N/A	N/A			1	CRL

N/A = not analyzed

[†]Limit of Detection — No "CRL" for these methods

^{**}Values listed for copper and lead are "action levels," not MCLs.

^{***}Pace Laboratories

JE
Jacobs Engineering Group Inc.
Washington Operations

Table 5-2. Subsurface Soil Control Samples

ANALYTE	CRL ¹ (µg/g)	91B17 (5 ft.) (µg/g)	91B17 (10 ft.) (µg/g)	91B17 (15 ft.) (µg/g)	91B18 (5 ft.) (µg/g)	CONTROL VALUE	
						Avg.	2 ² Avg.
Figure No.		5-7	5-7	5-7	5-8		
Aluminum	10.7	6,300	3,100	14,000	5,450	7,212	14,425
Antimony	82.9	<82.9	<82.9	<82.9	<82.9	82.9	165.8
Arsenic	12.7	<12.7	<12.7	<12.7	<12.7	12.7	25.4
Barium	4.87	47.5	33.4	17.6	55	38.4	76.7
Beryllium	0.25	0.684	1.14	1.99	0.875	1.17	2.34
Cadmium	0.427	<0.427	<0.427	<0.427	<0.427	0.427	0.854
Calcium	109	428	756	896	208	572	1,144
Chromium	0.974	51.6	6.63	15.8	8.13	20.5	41.1
Cobalt	2.5	17.4	10.7	20.4	12	15.1	30.2
Copper	3.38	8.51	9.52	28	11.7	14.4	28.9
Cyanide	1.22	<1.22	<1.22	<1.22	<1.22	1.22	2.44
Iron	12	40,000	9,400	29,000	15,000	23,350	46,700
Lead	10	38.4	17.2	23.3	21.7	25.1	50.3
Magnesium	138	279	416	896	265	464	928
Manganese	0.511	930	590	440	310	567	1,135
Mercury	0.087	<0.087	0.134	<0.087	<0.087	0.098	0.197
Molybdenum	4	<4	<4	<4	<4	4	8
Nickel	7.5	<7.5	11.6	38.5	13	17.6	35.3
Potassium	142	142	229	776	235	345	691
Selenium	12.4	<12.4	<12.4	<12.4	<12.4	12.4	24.8
Silver	1.01	<1.01	<1.01	<1.01	<1.01	1.01	2.02
Sodium	50	<50	<50	75.6	<50	56.4	112.8
Thallium	12.5	<12.5	<12.5	<12.5	<12.5	12.5	25.0
Vanadium	2	63.8	20	44.6	16.2	36.1	72.3
Zinc	4	40.9	32.9	119	51	60.9	121.9
Other Analyses							
Nitrate/Nitrite	1.00 ¹	N/A	N/A	N/A	N/A	1.00	2.00
TOC	40 ¹	N/A	N/A	N/A	N/A	40	80

¹Limit of Detection — No "CRL" for these methods
²Pace Laboratories
 N/A = not analyzed

Table 5-3. Surface Soil Control Samples

ANALYTE	CRL ¹ (µg/g)	SAMPLE S10S01 0.5 ft. (µg/g)	SAMPLE S26S02 0.5 ft. (µg/g)	SAMPLE S27S02 0.5 ft. (µg/g)	CONTROL VALUE	
					Avg.	2 ² Avg.
Figure No.		5-4	5-10	5-10		
Aluminum	10.7	5,130	31,000	15,000	17,043	34,087
Antimony	82.9	<82.9	<82.9	<82.9	82.9	165.8
Arsenic	12.7	<12.7	<12.7	<12.7	12.7	25.4
Barium	4.87	21.4	72.2	51.7	48.4	96.9
Beryllium	0.25	<0.25	0.817	0.419	0.495	0.991
Cadmium	0.427	<0.427	<0.427	<0.427	0.427	0.854
Calcium	109	1,300	525	420	748	1497
Chromium	0.974	9.59	25.2	13.6	16.1	32.3
Cobalt	2.5	4.75	26.9	15.2	15.6	31.2
Copper	3.38	<3.38	16.3	10.1	9.9	19.9
Cyanide	1.22	<1.22	<1.22	<1.22	1.22	2.44
Iron	12	9,300	28,000	17,000	18,100	36,200
Lead	10	<10	28.6	20.9	19.8	39.7
Magnesium	138	242	1,160	678	693	1,387
Manganese	0.511	120	1,200	320	547	1093
Mercury	0.087	<0.087	<0.087	<0.087	0.087	0.174
Molybdenum	4	<4	<4	<4	4	8
Nickel	7.5	<7.5	17.4	9.76	11.6	23.1
Potassium	142	208	858	413	493	986
Selenium	12.4	<12.4	<12.4	<12.4	12.4	24.8
Silver	1.01	<1.01	<1.01	<1.01	1.01	2.02
Sodium	50	<50	100	<50	67	133
Thallium	12.5	<12.5	<12.5	<12.5	12.5	25.0
Vanadium	2	19.6	54.8	32.4	35.6	71.2
Zinc	4	15.1	49.5	42.6	35.7	71.5
Other Analyses						
Nitrate/nitrite	1.0 ¹	1.0	N/A	N/A	1.0	2.0
TOC	40 ¹	10,400	N/A	N/A	10,400	20,800

¹Limit of Detection — No "CRL" for these methods
N/A = not analyzed
Pace Laboratories

Table 5-4. Sediment Control Samples

ANALYTE	CRL ^{**} (µg/g)	SAMPLE S8SD1 (µg/g)	SAMPLE S8SD2 (µg/g)	SAMPLE S8SD3 (µg/g)	SAMPLE S8SD3D (µg/g)	SAMPLE S8SD4 (µg/g)	CONTROL VALUE	
							Avg.	2 ⁺ Avg.
Figure No.		5-3	5-3	5-3	5-3	5-3		
Aluminum	10.7	15,000	16,000	13,000	20,000	17,000	16,200	32,400
Antimony	82.9	<82.9	<82.9	<82.9	<82.9	<82.9	82.9	165.8
Arsenic	12.7	<12.7	<12.7	<12.7	<12.7	<12.7	12.7	25.4
Barium	4.87	24.6	59.6	73.9	30.4	56.3	49.0	97.9
Beryllium	0.25	0.57	0.498	0.704	0.771	0.997	0.708	1.416
Cadmium	0.427	<0.427	<0.427	<0.427	<0.427	<0.427	0.427	0.854
Calcium	109	220	<109	237	238	358	232	465
Chromium	0.974	16.8	15.9	18.7	51.5	19.6	24.5	49.0
Cobalt	2.5	22.5	20.7	32.1	28.9	55.8	32	64
Copper	3.38	21.7	12.3	21	24.7	33.9	22.7	45.4
Cyanide	1.22	<1.22	<1.22	<1.22	<1.22	<1.22	1.22	2.44
Iron	12	29,000	12,000	41,000	48,000	37,000	33,400	66,800
Lead	10	<10	19.1	14.7	18.3	24	17.2	34.4
Magnesium	138	515	649	334	572	613	537	1,073
Manganese	0.511	192	540	740	330	1,200	600	1,201
Mercury	0.087	<0.0087	<0.087	<0.087	<0.087	<0.087	0.087	0.174
Molybdenum	4	<4	<4	<4	<4	<4	4	8
Nickel	7.5	14.3	12.8	<7.5	15.2	28.9	15.7	31.5
Potassium	142	846	607	376	736	735	660	1,320
Selenium	12.4	<12.4	<12.4	<12.4	<12.4	<12.4	12.4	24.8
Silver	1.01	<1.01	<1.01	<1.01	<1.01	<1.01	1.01	2.02
Sodium	50	<50	<50	81.5	91.5	80.9	70.8	141.6
Thallium	12.5	<12.5	<12.5	<12.5	<12.5	<12.5	12.5	25.0
Vanadium	2	48.5	29.4	47.9	57	52	47	94
Zinc	4	54.4	42.4	37.7	53.9	87.3	55.1	110.3
Other Analyses								
Nitrate/nitrite	1.00 [*]	N/A	N/A	N/A	N/A	N/A	1.00	2.00
TOC	40 [*]	N/A	N/A	N/A	N/A	N/A	40	80

^{*}Limit of Detection — No "CRL" for these methods
^{**}Pace Laboratories
 N/A = not analyzed

5.2 ANALYTIC DATA OVERVIEW

5.2.1 Groundwater

A summary of on-site groundwater chemical data is presented in Table 5-5. Each inorganic analyte was evaluated against the control screening value derived in Table 5-1, and each organic compound was evaluated against the CRL to determine potential contaminants. Table 5-5 lists the number of results for each chemical parameter, together with the CRL, a count of how many times it exceeded the control screening value, what frequency of excess this was, and what was found to be the maximum concentration.

The potential inorganic contaminants of concern are: aluminum, beryllium, cadmium, calcium, chromium, cobalt, iron, lead, magnesium, manganese, nickel, potassium, selenium, silver, sodium, vanadium, and zinc. The VOC acetone and the SVOC bis(2-ethylhexyl) phthalate were detected in several groundwater samples. The explosives 4-nitrotoluene and HMX were detected in one sample each, while RDX was detected in two. Nitrate/nitrite was detected in nine samples, and TOC was detected in the only sample.

Table 5-6 presents pH, conductivity and temperature data for all water samples collected on-site during the field investigations. The pH values range from 4.94 to 10.30 with a mean value of 6.84. Conductivity values range from a minimum of 50 $\mu\text{mhos/cm}$ to a maximum of 533 $\mu\text{mhos/cm}$ with a mean value of 180.05. The relatively low conductivity is indicative of a low concentration of ions in solution. This supports the presumption that elevated concentrations of inorganics in water sample analyses is most probably due to particulate inorganic material. The high pH value (10.30) is probably due to grout contamination of well 91B11.

Table 5-5. Groundwater Chemical Data Summary

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/l)
	CRL** (µg/l)		Number	Frequency (%)	
Inorganics					
Aluminum	107	16	2	12	31,600
Antimony	37.1	16	0	0	<37.1
Arsenic	6.01	16	0	0	11.6
Barium	20	16	0	0	1,650
Beryllium	2.5	16	2	12	3.22
Cadmium	5	16	1	6	18.4
Calcium	500	16	3	19	63,000
Chromium	15	16	3	19	145
Cobalt	25	16	2	12	433
Copper	20	16	0	0	353
Cyanide	8.17	17	0	0	<8.17
Iron	120	16	1	6	99,000
Lead	1.26 ¹	34	8	24	137
Magnesium	500	16	5	31	33,000
Manganese	5.11	16	1	6	18,000
Mercury	0.74	16	0	0	<0.74
Molybdenum	30.9	16	0	0	<30.9
Nickel	63.1	16	2	12	180
Potassium	1250	16	1	6	12,300
Selenium	14.9 ²	34	0	0	<75
Silver	12.5	16	1	6	105
Sodium	500	16	4	25	38,400
Thallium	2.5 ³	34	1	3	2.64/<100
Vanadium	20	16	3	19	109
Zinc	13	16	3	19	1,240



Table 5-5. Groundwater Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/l)
	CRL'' (µg/l)		Number	Frequency (%)	
VOCs					
Acetone	10	16	5	31	21
Benzene	5	16	0	0	<5
Bromodichloromethane	5	16	0	0	<5
Bromoform	5	16	0	0	<5
Bromomethane	10	16	0	0	<10
Carbon disulfide	5	16	0	0	<5
Carbon tetrachloride	5	16	0	0	<5
Chlorobenzene	5	16	0	0	<5
Chloroethane	10	16	0	0	<10
Chloroethene	10	16	0	0	<10
Chloroform	5	16	0	0	<5
Chloromethane	10	16	0	0	<10
Dibromochloromethane	5	16	0	0	<5
1,1-Dichlorethane	5	16	0	0	<5
1,2-Dichloroethane	5	16	0	0	<5
1,1-Dichloroethylene	5	16	0	0	<5
cis-1,2-Dichloroethylene	5	16	0	0	<5
cis-1,3-Dichloropropylene	5	16	0	0	<5
trans-1,2-Dichloroethylene	5	16	0	0	<5
1,2-Dichloropropane	5	16	0	0	<5
trans-1,3-Dichloropropylene	5	16	0	0	<5
Ethylbenzene	5	16	0	0	<5
Methylene chloride	5	16	0	0	<5
Methylethyl ketone	10	16	0	0	<10
Methylisobutyl ketone	10	16	0	0	<10

Table 5-5. Groundwater Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS	CRL** (µg/l)	NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/l)
			Number	Frequency (%)	
Methyl-N-butyl ketone	10	16	0	0	<10
Styrene	5	16	0	0	<5
1,1,2,2-Tetrachloroethane	5	16	0	0	<5
Tetrachloroethylene	5	16	0	0	<5
1,1,1-Trichloroethane	5	16	0	0	<5
1,1,2-Trichloroethane	5	16	0	0	<5
Trichloroethylene	5	16	0	0	<5
Trifluorochloromethane	5	16	0	0	<5
Toluene	5	16	0	0	<5
Xylenes	5	16	0	0	<5
SVOCs					
Acenaphthene	10	16	0	0	<10
Acenaphthylene	10	16	0	0	<10
Anthracene	10	16	0	0	<10
Benzo[a]anthracene	10	16	0	0	<10
Benzo[a]pyrene	10	16	0	0	<10
Benzo[b]fluoranthene	10	16	0	0	<10
Benzo[g,h]perylene	10	16	0	0	<10
Benzo[k]fluoranthene	10	16	0	0	<10
Benzoic acid	50	16	0	0	<50
Benzyl alcohol	10	16	0	0	<10
Bis (2-chloroisopropyl) ether	10	16	0	0	<10
Bis (2-chloroethyl) ether	10	16	0	0	<10
Bis (2-chloroethoxy) methane	10	16	0	0	<10
Bis (2-ethylhexyl) phthalate	10	16	1	6	41
4-Bromophenylphenyl ether	10	16	0	0	<10



Table 5-5. Groundwater Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/l)
	CRL** (µg/l)		Number	Frequency (%)	
Butylbenzyl phthalate	10	16	0	0	<10
4-Chloroaniline	10	16	0	0	<10
2-Chloronaphthalene	50	16	0	0	<50
Chlorophenols	10	16	0	0	<10
4-Chlorophenylphenyl ether	10	16	0	0	<10
Chrysene	10	16	0	0	<10
Dibenz[a,h]anthracene	10	16	0	0	<10
Dibenzofuran	10	16	0	0	<10
1,2-Dichlorobenzene	10	16	0	0	<10
1,3-Dichlorobenzene	10	16	0	0	<10
1,4-Dichlorobenzene	10	16	0	0	<10
3,3'-Dichlorobenzidine	20	16	0	0	<20
2,4-Dichlorophenol	10	16	0	0	<10
Diethyl phthalate	10	16	0	0	<10
2,4-Dimethylphenol	10	16	0	0	<10
Dimethyl phthalate	10	16	0	0	<10
Di-N-butyl phthalate	10	16	0	0	<10
Di-N-octyl phthalate	10	16	0	0	<10
2,4-Dinitrophenol	50	16	0	0	<50
Fluoranthene	10	16	0	0	<10
Fluorene	10	16	0	0	<10
Hexachlorobenzene	10	16	0	0	<10
Hexachlorobutadiene	10	16	0	0	<10
Hexachlorocyclopentadiene	10	16	0	0	<10
Hexachloroethane	10	16	0	0	<10
Indeno[1,2,3-c,d]pyrene	10	16	0	0	<10

Table 5-5. Groundwater Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/l)
	CRL ¹ (µg/l)		Number	Frequency (%)	
Isophorone	10	16	0	0	<10
3-Methyl-4-chlorophenol	10	16	0	0	<10
2-Methyl-4,6-dinitrophenol	50	16	0	0	<50
2-Methylnaphthalene	10	16	0	0	<10
2-Methylphenol	10	16	0	0	<10
4-Methylphenol	10	16	0	0	<10
Napthalene	10	16	0	0	<10
2-Nitroaniline	50	16	0	0	<50
3-Nitroaniline	50	16	0	0	<50
4-Nitroaniline	50	16	0	0	<50
Nitrobenzene	10	16	0	0	<10
2-Nitrophenol	10	16	0	0	<10
4-4-Nitrophenol	50	16	0	0	<50
N-Nitrosodi-N-propylamine	10	16	0	0	<10
N-Nitrosodiphenylamine	10	16	0	0	<10
Pentachlorophenol	50	16	0	0	<50
Phenanthrene	10	16	0	0	<10
Phenol	10	16	0	0	<10
Pyrene	10	16	0	0	<10
1,2,4-Trichlorobenzene	10	16	0	0	<10
2,4,5-Trichlorophenol	50	16	0	0	<50
2,4,6-Trichlorophenol	10	16	0	0	<10
Explosives					
1,3-Dinitrobenzene	0.319	16	0	0	<0.319
2,4-Dinitrotoluene	0.321 ⁴	32	0	0	<10
2,6-Dinitrotoluene	0.64 ⁵	32	0	0	<10

Table 5-5. Groundwater Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/l)
	CRL** (µg/l)		Number	Frequency (%)	
<i>HMX</i>	2.29	16	1	6	86
<i>Nitroglycerine</i>	3.2	16	0	0	<3.2
<i>2-Nitrotoluene</i>	0.646	16	0	0	<0.646
<i>3-Nitrotoluene</i>	0.492	16	0	0	<0.492
<i>4-Nitrotoluene</i>	0.338	16	1	6	2.25
<i>Pentaerythritol tetranitrate</i>	5.02	16	0	0	<5.02
<i>RDX</i>	0.653	16	2	12	40.6
<i>Tetryl</i>	1.29	16	0	0	<1.29
<i>1,3,5-Trinitrobenzene</i>	0.517	16	0	0	<0.517
<i>2,4,6-Trinitrotoluene</i>	0.319	16	0	0	<0.319
Pesticides					
<i>Aldrin</i>	0.0638	1	0	0	<0.0638
<i>alpha-Benzenehexachloride</i>	0.0434	1	0	0	<0.0434
<i>beta-Benzenehexachloride</i>	0.0109	1	0	0	<0.0109
<i>delta-Benzenehexachloride</i>	0.0488	1	0	0	<0.0488
<i>2,2-Bis (p-chlorophenyl)-1,1-dichloroethane</i>	0.0848	1	0	0	<0.0848
<i>2,2-Bis (p-chlorophenyl)-1,1-dichloroethene</i>	0.0946	1	0	0	<0.0946
<i>2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane</i>	0.0316	1	0	0	<0.0316
<i>alpha-Chlordane</i>	0.0202	1	0	0	<0.0202
<i>gamma-Chlordane</i>	0.045	1	0	0	<0.045
<i>Dieldrin</i>	0.0321	1	0	0	<0.0321
<i>alpha-Endosulfan</i>	0.00856	1	0	0	<0.00856
<i>beta-Endosulfan</i>	0.012	1	0	0	<0.012
<i>Endrin</i>	0.0372	1	0	0	<0.0372
<i>Endrin Aldehyde</i>	0.0697	1	0	0	<0.0697
<i>Endrin ketone</i>	0.0282	1	0	0	<0.0282

Table 5-5. Groundwater Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/l)
	CRL** (µg/l)		Number	Frequency (%)	
<i>Endosulfan sulfate</i>	0.02	1	0	0	<0.02
<i>Heptachlor</i>	0.0631	1	0	0	<0.0631
<i>Heptachlor epoxide</i>	0.006	1	0	0	<0.006
<i>Lindane</i>	0.0429	1	0	0	<0.0429
<i>Methoxychlor</i>	0.267	1	0	0	<0.267
<i>PCB 1016</i>	0.1	1	0	0	<0.1
<i>PCB 1221</i>	0.2	1	0	0	<0.2
<i>PCB 1232</i>	0.1	1	0	0	<0.1
<i>PCB 1242</i>	0.1	1	0	0	<0.1
<i>PCB 1248</i>	0.1	1	0	0	<0.1
<i>PCB 1254</i>	0.1	1	0	0	<0.1
<i>PCB 1260</i>	0.1	1	0	0	<0.1
<i>Toxaphene</i>	0.5	1	0	0	<0.5
Other Analyses					
<i>Nitrate/nitrite</i>	1.0*	15	9	60	1,050
<i>TPHC</i>	1,000*	1	0	0	<1,000
<i>TOC</i>	1.0*	1	1	100	3,150

¹Pb was analyzed by method SD08 (CRL = 1.26 µg/l) and SS15 (CRL = 100 µg/l).

²Se was analyzed by method SD08 (CRL = 14.9 µg/l) and SS15 (CRL = 75 µg/l).

³Ti was analyzed by method SD08 (CRL = 2.5 µg/l) and SS15 (CRL = 100 µg/l).

⁴2,4-Dinitrotoluene was analyzed by method UW35 (CRL = 0.0321 µg/l) and UM06 (MDL = 10 µg/l).

⁵2,6-Dinitrotoluene was analyzed by method UW35 (CRL = 0.64 µg/l) and UM06 (MDC = 10 µg/l).

*Limit of Detection - No "CRL" for these methods

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Table 5-6. Groundwater and Surface Water Parameters
Measured During Sample Collection

LOCATION	pH (Std. Units)	CONDUCTIVITY (µmhos/cm)	TEMP. (°C)	NOTES
NBSW1	6.75	65	9.2	SURFACE
NBSW2	6.80	70	8.4	SURFACE
NBSW3	7.50	183	12.0	SURFACE
S5SW1	7.97	533	6.12	SURFACE
W2-17	6.18	246	15.0	WELL
W2-18	6.15	50	16.8	WELL
91B11	10.30	230	19.0	WELL
91B12	6.34	85	11.5	WELL
91B13	5.92	55	14.7	WELL
91B14	4.94	52	13.4	WELL
91B15	8.51	514	17.5	WELL
91B16	6.45	54	15.0	WELL
91B17	7.05	175	14.0	WELL
91B18	6.25	136	13.5	WELL
91B19	6.62	86	15.7	WELL
91B20	6.17	60	17.6	WELL
91B21	6.52	526	17.5	WELL
91B22	6.56	101	15.2	WELL
91B23	7.77	312	15.6	WELL
91B24	6.20	68	15.5	WELL

5.2.2 Soil and Sediment

Surface soil, subsurface soil and sediment chemistry data summaries are presented in Tables 5-7 and 5-8, and 5-9 respectively. The summaries include the number of results in the IRDMIS data base for the ESI, the frequency of detections above the control screening values (listed in Tables 5-1 through 5-4), and maximum concentrations.

For surface soil, the most frequent of the analytical detections above the control screening values include the inorganics copper, lead, and zinc. Total petroleum hydrocarbons (TPHC) was detected in all of the surface soil samples on which this analysis was performed. Other detections include methylene chloride, trichlorofluoromethane, trichloroethylene, anthracene, bis(2-ethylhexyl) phthalate, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h]perylene, benzo[k]fluoranthene, chrysene, fluoranthene, indeno[1,2,3-c,d]pyrene, phenanthrene, pyrene and toluene. Nitrate/nitrite was detected in one sample. Explosives 2,4,6-trinitrotoluene, 2,4-dinitrotoluene, HMX, and nitroglycerine were each detected once in surface soil samples.

For subsurface soil, the most frequent of the analytical detections above the control screening values were the inorganics aluminum, cobalt, copper, potassium, manganese, and sodium. The VOC acetone was detected in three subsurface samples, methylene chloride was detected in two, and trichloroethylene was detected in one. TPHC was detected in six samples, nitrate/nitrite in one, and TOC in two.

For sediments, the frequency of detection of inorganics above the control screening values is the lowest of all media, with calcium and chromium occurring most frequently. Acetone and methylene ethyl ketone were each detected in the one sample for which they were analyzed. Benzo[a]anthracene, benzo[a]pyrene, chrysene, and fluoranthene were also detected in the one instance where they were analyzed. Nitrate/nitrite was detected in one sample, and TPHC and TOC were each detected in both samples where these analyses were performed. PCB 1254 was detected in one sample.



5.2.3 Chemical Quality Control Data

Chemical quality control (CQC) samples were collected and analyzed during the ESI to assess the quality of the data generated during the project. See Appendix E for a full discussion of this data and their significance to the project. Appendix E concludes that although various chemical parameters were detected in the CQC samples, the quality of the data was not negatively impacted. Equipment rinse blanks were collected in the field to evaluate the quality of field decontamination procedures. Trip blanks accompanied all samples while in the field and during shipment to the laboratory to evaluate the quality of sample storage, handling, and shipment. Field blanks are often collected to evaluate the quality of the field ambient air, however, no samples of this type were collected during the ESI. Method blanks were analyzed in the laboratory to assess the quality of the laboratory performance.

Six equipment rinse blanks were collected in the field and analyzed in the laboratory. Detected inorganic analytes included: aluminum, barium, calcium, iron, manganese, lead and zinc. Detected organic compounds included TOC and trichloroethylene. All parameters detected in the rinsate samples were also detected in environmental samples collected during the ESI. Trichloroethylene was detected in rinsate sample ER91B23 at 5.3 µg/l and was also detected in the associated soil sample at 0.011 µg/g. With this association between results, it is possible that contaminated equipment was responsible for the detection in the soil sample. However, because the concentration of trichloroethylene in the soil sample was less than 10 times the amount detected in the blank, it is considered insignificant. And because this event only happened once, it can be concluded that decontamination procedures in the field were adequate and did not negatively impact data quality.

Twenty-two trip blanks were managed in the field and shipped with the samples to the laboratory for analysis. Detectable concentrations of acetone and trichloroethylene were found in trip blanks. However, because the concentrations of acetone and

trichloroethylene in environmental samples were at values less than 10 times the amount detected in the blanks, they are considered insignificant. It can be concluded that the storage, handling, and shipment of the samples did not negatively impact the quality of the data.

Organic compounds were detected in method blanks collected in the laboratory. However, because they were all "unknown" contaminants, it can be concluded that these results are due to the sensitivity of the analytical equipment and not to the presence and use of contaminated equipment, and it can be concluded the laboratory performance did not negatively impact the quality of the data.



Table 5-7. Surface Soil Chemical Data Summary

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
Inorganics					
Aluminum	10.7	32	3	9	56,000
Antimony	82.9	32	0	0	<82.9
Arsenic	12.7	32	0	0	<12.7
Barium	4.87	32	10	31	954
Beryllium	0.25	32	6	19	2.42
Cadmium	0.427	32	8	25	22.1
Calcium	109	32	14	44	100,000
Chromium	0.974	32	5	16	114
Cobalt	2.5	32	5	16	90.8
Copper	3.38	32	22	69	453
Cyanide	1.22	35	0	0	1.92
Iron	12	32	7	22	69,000
Lead	10	32	15	47	9,100
Magnesium	138	32	10	31	59,000
Manganese	0.511	32	8	25	7,100
Mercury	0.087	32	1	3	0.195
Molybdenum	4	32	2	6	16.5
Nickel	7.5	32	6	19	84.4
Potassium	142	32	6	19	1,850
Selenium	12.4	32	0	0	<12.4
Silver	1.01	32	2	6	2.92
Sodium	50	32	1	3	177
Thallium	12.5	32	0	0	<12.5
Vanadium	2	32	4	12	83.4
Zinc	4	32	20	62	969

Table 5-7. Surface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL" (µg/g)		Number	Frequency (%)	
VOCs					
Acetone	0.045	4	0	0	<0.045
Benzene	0.0025	4	0	0	<0.0025
Bromodichloromethane	0.0025	4	0	0	<0.0025
Bromoform	0.0025	4	0	0	<0.0025
Bromomethane	0.0031	4	0	0	<0.0031
Carbon disulfide	0.014	4	0	0	<0.014
Carbon tetrachloride	0.0031	4	0	0	<0.0031
Chlorobenzene	0.0025	4	0	0	<0.0025
Chloroethane	0.003	4	0	0	<0.003
Chloroethene	0.0038	4	0	0	<0.0038
Chloroform	0.0026	4	0	0	<0.0026
Chloromethane	0.035	4	0	0	<0.035
Dibromochloromethane	0.057	4	0	0	<0.057
1,1-Dichlorethane	0.0025	4	0	0	<0.0025
1,2-Dichloroethane	0.0027	4	0	0	<0.0027
1,1-Dichloroethylene	0.32	4	0	0	<0.032
cis-1,2-Dichloroethylene	0.0025	4	0	0	<0.0025
trans 1,2-Dichloroethene	0.0025	4	0	0	<0.0025
1,2-Dichloropropane	0.0025	4	0	0	<0.0025
cis-1,3-Dichloropropylene	0.003	4	0	0	<0.003
trans-1,3-Dichloropropylene	0.0025	4	0	0	<0.0025
Ethylbenzene	0.0025	4	0	0	<0.0025
Methylene chloride	0.0062	4	1	25	0.0098
Methylethyl ketone	0.0051	4	0	0	<0.0051
Methylisobutyl ketone	0.019	4	0	0	<0.019

Table 5-7. Surface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL ¹ (µg/g)		Number	Frequency (%)	
Methyl-N-butyl ketone	0.018	4	0	0	<0.018
Styrene	0.0025	4	0	0	<0.0025
1,1,2,2-Tetrachloroethane	0.012	4	0	0	<0.012
Tetrachloroethylene	0.0025	4	0	0	<0.0025
1,1,1-Trichloroethane	0.0025	4	0	0	<0.0025
1,1,2-Trichloroethane	0.0025	4	0	0	<0.0025
Trichloroethylene	0.0025	4	1	25	0.0033
Trichlorofluoromethane	0.005	4	1	25	0.0075
Toluene	0.0025	4	1	25	0.0043
Xylenes	0.0075	4	0	0	<0.0075
SVOCs					
Acenaphthene	0.27	4	0	0	<0.27
Acenaphthylene	0.27	4	0	0	<0.27
Anthracene	0.17	4	1	25	0.23
Benzo[a]anthracene	0.17	4	1	25	1.1
Benzo[a]pyrene	0.24	4	2	50	1.4
Benzo[b]fluoranthene	0.73	4	1	25	1.8
Benzo[g,h]perylene	0.25	4	1	25	0.98
Benzo[k]fluoranthene	0.4	4	1	25	1
Benzoic acid	0.92	4	0	0	<0.92
Benzyl alcohol	0.17	4	0	0	<0.17
Bis (2-chloroethoxy) methane	0.17	4	0	0	<0.17
Bis (2-chloroethyl) ether	1.6	4	0	0	<1.6
Bis (2-chloroisopropyl) ether	0.17	4	0	0	<0.17
Bis (2-ethylhexyl) phthalate	0.19	4	1	25	0.37
4-Bromophenylphenyl ether	0.17	4	0	0	<0.17

Table 5-7. Surface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
<i>Butylbenzyl phthalate</i>	0.2	4	0	0	<0.2
<i>4-Chloroaniline</i>	0.33	4	0	0	<0.33
<i>2-Chloronaphthalene</i>	0.33	4	0	0	<0.33
<i>Chlorophenols</i>	0.17	4	0	0	<0.17
<i>4-Chlorophenylphenyl ether</i>	0.2	4	0	0	<0.2
<i>Chrysene</i>	0.27	4	1	25	0.88
<i>Dibenz[a,h]anthracene</i>	0.27	4	0	0	<0.27
<i>Dibenzofuran</i>	0.17	4	0	0	<0.17
<i>1,2-Dichlorobenzene</i>	0.32	4	0	0	<0.32
<i>1,3-Dichlorobenzene</i>	0.58	4	0	0	<0.58
<i>1,4-Dichlorobenzene</i>	0.17	4	0	0	<0.17
<i>3,3'-Dichlorobenzidine</i>	0.66	4	0	0	<0.66
<i>2,4-Dichlorophenol</i>	0.28	4	0	0	<0.28
<i>Diethyl phthalate</i>	0.35	4	0	0	<0.35
<i>2,4-Dimethylphenol</i>	0.33	4	0	0	<0.33
<i>Dimethyl phthalate</i>	0.17	4	0	0	<0.17
<i>Di-N-butyl phthalate</i>	0.51	4	0	0	<0.51
<i>Di-N-octyl phthalate</i>	0.22	4	0	0	<0.22
<i>2,4-Dinitrophenol</i>	1.7	4	0	0	<1.7
<i>Fluoranthene</i>	0.17	4	1	25	2.4
<i>Fluorene</i>	0.17	4	0	0	<0.17
<i>Hexachloreobenzene</i>	0.26	4	0	0	<0.26
<i>Hexachlorobutadiene</i>	0.28	4	0	0	<0.28
<i>Hexachlorocyclopentadiene</i>	1.8	4	0	0	<1.8
<i>Hexachloroethane</i>	0.17	4	0	0	<0.17
<i>Indeno[1,2,3-c,d]pyrene</i>	0.17	4	1	25	1.2

Table 5-7. Surface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
Isophorone	0.32	4	0	0	<0.32
3-Methyl-4-chlorophenol	0.23	4	0	0	<0.23
2-Methyl-4,6-dinitrophenol	0.84	4	0	0	<0.84
2-Methylnaphthalene	0.17	4	0	0	<0.17
2-Methylphenol	0.17	4	0	0	<0.17
4-Methylphenol	0.18	4	0	0	<0.18
Naphthalene	0.17	4	0	0	<0.17
2-Nitroaniline	0.36	4	0	0	<0.36
3-Nitroaniline	1.7	4	0	0	<1.7
4-Nitroaniline	1.7	4	0	0	<1.7
Nitrobenzene	0.19	4	0	0	<0.19
2-Nitrophenol	0.26	4	0	0	<0.26
4-4-Nitrophenol	2.5	4	0	0	<2.5
N-Nitrosodi-N-propylamine	1.1	4	0	0	<1.1
N-Nitrosodiphenylamine	0.17	4	0	0	<0.17
Pentachlorophenol	0.48	4	0	0	<0.48
Phenanthrene	0.17	4	1	25	0.83
Phenol	0.17	4	0	0	<0.17
Pyrene	0.97	4	1	25	1.4
1,2,4-Trichlorobenzene	0.29	4	0	0	<0.29
2,4,5-Trichlorophenol	0.24	4	0	0	<0.24
2,4,6-Trichlorophenol	0.3	4	0	0	<0.3
Explosives					
1,3-Dinitrobenzene	0.249	26	0	0	<0.249
2,4-Dinitrotoluene	0.251	26	1	4	0.448
2,6-Dinitrotoluene	0.5	26	0	0	<0.5

Table 5-7. Surface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
<i>HMX</i>	0.499	26	1	4	1.01
<i>Nitroglycerine</i>	2.5	26	1	4	17.6
<i>2-Nitrotoluene</i>	0.505	26	0	0	<0.505
<i>3-Nitrotoluene</i>	0.251	26	0	0	<0.251
<i>4-Nitrotoluene</i>	0.245	26	0	0	<0.245
<i>Pentaerythritol tetranitrate</i>	2.5	26	0	0	<2.5
<i>RDX</i>	0.51	26	0	0	<0.51
<i>Tetryl</i>	1.27	26	0	0	<1.27
<i>1,3,5-Trinitrobenzene</i>	0.25	26	0	0	<0.25
<i>2,4,6-Trinitrotoluene</i>	0.25	26	1	4	1.28
Pesticides/PCBs					
<i>Aldrin</i>	0.013	1	0	0	<0.013
<i>alpha-Benzenehexachloride</i>	0.0025	1	0	0	<0.0025
<i>beta-Benzenehexachloride</i>	0.0054	1	0	0	<0.0054
<i>delta-Benzenehexachloride</i>	0.0228	1	0	0	<0.0228
<i>2,2-Bis (p-chlorophenyl)-1,1-dichloroethane</i>	0.0112	1	0	0	<0.0112
<i>2,2-Bis (p-chlorophenyl)-1,1-dichloroethene</i>	0.0142	1	0	0	<0.0142
<i>2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane</i>	0.0096	1	0	0	<0.0096
<i>alpha-Chlordane</i>	0.004	1	0	0	<0.004
<i>gamma-Chlordane</i>	0.0214	1	0	0	<0.0214
<i>Dieldrin</i>	0.0078	1	0	0	<0.0078
<i>alpha-Endosulfan</i>	0.0047	1	0	0	<0.0047
<i>beta-Endosulfan</i>	0.0071	1	0	0	<0.0071
<i>Endrin</i>	0.0111	1	0	0	<0.0111
<i>Endrin aldehyde</i>	0.0276	1	0	0	<0.0276
<i>Endrin ketone</i>	0.0061	1	0	0	<0.0061

Table 5-7. Surface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
Endosulfan sulfate	0.013	1	0	0	<0.013
Heptachlor	0.0096	1	0	0	<0.0096
Heptachlor epoxide	0.0039	1	0	0	<0.0039
Lindane	0.02	1	0	0	<0.02
Methoxychlor	0.211	1	0	0	<0.211
PCB 1016	0.04	1	0	0	<0.04
PCB 1221	0.08	1	0	0	<0.08
PCB 1232	0.04	1	0	0	<0.04
PCB 1242	0.04	1	0	0	<0.04
PCB 1248	0.04	1	0	0	<0.04
PCB 1254	0.04	1	0	0	<0.04
PCB 1260	0.04	1	0	0	<0.04
Toxaphene	0.2	1	0	0	<0.2
Other Analyses					
Nitrate/Nitrite	1.00*	5	1	20	4.14
TPHC	10*	12	12	100	658
TOC	40*	9	0	0	17,900

*Limit of Detection - No "CRL" for these methods
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Table 5-8. Subsurface Soil Chemical Data Summary

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL™ (µg/g)		Number	Frequency (%)	
Inorganics					
Aluminum	10.7	37	7	19	27,000
Antimony	82.9	37	0	0	<82.9
Arsenic	12.7	37	0	0	<12.7
Barium	4.87	37	6	16	547
Beryllium	0.25	37	3	8	3.66
Cadmium	0.427	37	1	3	6.51
Calcium	109	37	3	8	1,860
Chromium	0.974	37	2	5	70.9
Cobalt	2.5	37	8	22	66.8
Copper	3.38	37	7	19	146
Cyanide	1.22	36	0	0	<1.22
Iron	12	37	3	8	53,000
Lead	10	37	4	11	136
Magnesium	138	37	5	14	1,990
Manganese	0.511	37	8	22	3,600
Mercury	0.087	37	5	14	0.521
Molybdenum	4	37	0	0	5.87
Nickel	7.5	37	6	16	61
Potassium	142	37	9	24	928
Selenium	12.4	37	0	0	<12.4
Silver	1.01	37	0	0	<1.01
Sodium	50	37	8	22	278
Thallium	12.5	37	0	0	<12.5
Vanadium	2	37	2	5	76.5
Zinc	4	37	3	8	336

Table 5-8. Subsurface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL " (µg/g)		Number	Frequency (%)	
VOCs					
Acetone	0.045	8	3	38	0.1
Benzene	0.0025	8	0	0	<0.0025
Bromodichloromethane	0.0025	8	0	0	<0.0025
Bromoform	0.0025	8	0	0	<0.0025
Bromomethane	0.0031	8	0	0	<0.0031
Carbon disulfide	0.014	8	0	0	<0.014
Carbon tetrachloride	0.0031	8	0	0	<0.0031
Chlorobenzene	0.0025	8	0	0	<0.0025
Chloroethane	0.003	8	0	0	<0.003
Chloroethene	0.0038	8	0	0	<0.0038
Chloroform	0.0026	8	0	0	<0.0026
Chloromethane	0.035	8	0	0	<0.035
Dibromochloromethane	0.057	8	0	0	<0.057
1,1-Dichlorethane	0.0025	8	0	0	<0.0025
1,2-Dichloroethane	0.0027	8	0	0	<0.0027
1,1-Dichloroethylene	0.32	8	0	0	<0.032
cis-1,2-Dichloroethylene	0.0025	8	0	0	<0.0025
trans-1,2-Dichloroethylene	0.0025	8	0	0	<0.0025
1,2-Dichloropropane	0.0025	8	0	0	<0.0025
cis-1,3-Dichloropropylene	0.003	8	0	0	<0.003
trans-1,3-Dichloropropylene	0.0025	8	0	0	<0.0025
Ethylbenzene	0.0025	8	0	0	<0.0025
Methylene chloride	0.0062	8	2	25	0.03
Methylethyl ketone	0.0051	8	0	0	<0.0051

Table 5-8. Subsurface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL" (µg/g)		Number	Frequency (%)	
Methylisobutyl ketone	0.019	8	0	0	<0.019
Methyl-N-butyl ketone	0.018	8	0	0	<0.018
Styrene	0.0025	8	0	0	<0.0025
1,1,2,2-Tetrachloroethane	0.012	8	0	0	<0.012
Tetrachloroethylene	0.0025	8	0	0	<0.0025
1,1,1-Trichloroethane	0.0025	8	0	0	<0.0025
1,1,2-Trichloroethane	0.0025	8	0	0	<0.0025
Trichloroethylene	0.0025	8	1	13	0.011
Trifluorochloromethane	0.005	8	0	0	<0.005
Toluene	0.0025	8	0	0	<0.0025
Xylenes	0.0075	8	0	0	<0.0075
SVOCs					
Acenaphthene	0.27	8	0	0	<0.27
Acenaphthylene	0.27	8	0	0	<0.27
Anthracene	0.17	8	0	0	<0.17
Benzo[a]anthracene	0.17	8	0	0	<0.17
Benzo[a]pyrene	0.24	8	0	0	<0.24
Benzo[b]fluoranthene	0.73	8	0	0	<0.73
Benzo[g,h]perylene	0.25	8	0	0	<0.25
Benzo[k]fluoranthene	0.4	8	0	0	<0.4
Benzoic acid	0.92	8	0	0	<0.92
Benzyl alcohol	0.17	8	0	0	<0.17
Bis (2-chloroisopropyl) ether	0.17	8	0	0	<0.17
Bis (2-chloroethyl) ether	1.6	8	0	0	<1.6
Bis (2-chloroethoxy) methane	0.17	8	0	0	<0.17
Bis (2-ethylhexyl) phthalate	0.19	8	0	0	<0.19

Table 5-8. Subsurface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
4-Bromophenylphenyl ether	0.17	8	0	0	<0.17
Butylbenzyl phthalate	0.2	8	0	0	<0.2
4-Chloroaniline	0.33	8	0	0	<0.33
2-Chloronaphthalene	0.33	8	0	0	<0.33
Chlorophenols	0.17	8	0	0	<0.17
4-Chlorophenylphenyl ether	0.2	8	0	0	<0.2
Chrysene	0.27	8	0	0	<0.27
Dibenz[a,h]anthracene	0.27	8	0	0	<0.27
Dibenzofuran	0.17	8	0	0	<0.17
1,2-Dichlorobenzene	0.32	8	0	0	<0.32
1,3-Dichlorobenzene	0.58	8	0	0	<0.58
1,4-Dichlorobenzene	0.17	8	0	0	<0.17
3,3'-Dichlorobenzidine	0.66	8	0	0	<0.66
2,4-Dichlorophenol	0.28	8	0	0	<0.28
Diethyl phthalate	0.35	8	0	0	<0.35
2,4-Dimethylphenol	0.33	8	0	0	<0.33
Dimethyl phthalate	0.17	8	0	0	<0.17
Di-N-butyl phthalate	0.51	8	0	0	<0.51
Di-N-octyl phthalate	0.22	8	0	0	<0.22
2,4-Dinitrophenol	1.7	8	0	0	<1.7
Fluoranthene	0.17	8	0	0	2.4
Fluorene	0.17	8	0	0	<0.17
Hexachloreobenzene	0.26	8	0	0	<0.26
Hexachlorobutadiene	0.28	8	0	0	<0.28
Hexachlorocyclopentadiene	1.8	8	0	0	<1.8
Hexachloroethane	0.17	8	0	0	<0.17

Table 5-8. Subsurface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL" (µg/g)		Number	Frequency (%)	
<i>Indeno[1,2,3-c,d]pyrene</i>	0.17	8	0	0	1.2
<i>Isophorone</i>	0.32	8	0	0	<0.32
<i>3-Methyl-4-chlorophenol</i>	0.23	8	0	0	<0.23
<i>2-Methyl-4,6-dinitrophenol</i>	0.84	8	0	0	<0.84
<i>2-Methylnaphthalene</i>	0.17	8	0	0	<0.17
<i>2-Methylphenol</i>	0.17	8	0	0	<0.17
<i>4-Methylphenol</i>	0.18	8	0	0	<0.18
<i>Naphthalene</i>	0.17	8	0	0	<0.17
<i>2-Nitroaniline</i>	0.36	8	0	0	<0.36
<i>3-Nitroaniline</i>	1.7	8	0	0	<1.7
<i>4-Nitroaniline</i>	1.7	8	0	0	<1.7
<i>Nitrobenzene</i>	0.19	8	0	0	<0.19
<i>2-Nitrophenol</i>	0.26	8	0	0	<0.26
<i>4-4-Nitrophenol</i>	2.5	8	0	0	<2.5
<i>N-Nitrosodi-N-propylamine</i>	1.1	8	0	0	<1.1
<i>N-Nitrosodiphenylamine</i>	0.17	8	0	0	<0.17
<i>Pentachlorophenol</i>	0.48	8	0	0	<0.48
<i>Phenanthrene</i>	0.17	8	0	0	0.83
<i>Phenol</i>	0.17	8	0	0	<0.17
<i>Pyrene</i>	0.97	8	0	0	1.4
<i>1,2,4-Trichlorobenzene</i>	0.29	8	0	0	<0.29
<i>2,4,5-Trichlorophenol</i>	0.24	8	0	0	<0.24
<i>2,4,6-Trichlorophenol</i>	0.3	8	0	0	<0.3
Explosives					
<i>1,3-Dinitrobenzene</i>	0.249	37	0	0	<0.249
<i>2,4-Dinitrotoluene</i>	0.251	37	0	0	<0.251

Table 5-8. Subsurface Soil Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL ^{**} (µg/g)		Number	Frequency (%)	
2,6-Dinitrotoluene	0.5	37	0	0	<0.5
HMX	0.499	37	0	0	<0.499
Nitroglycerine	2.5	37	0	0	<2.5
2-Nitrotoluene	0.505	37	0	0	<0.505
3-Nitrotoluene	0.251	37	0	0	<0.251
4-Nitrotoluene	0.245	37	0	0	<0.245
Pentaerythritol tetranitrate	2.5	37	0	0	<2.5
RDX	0.51	37	0	0	<0.51
Tetryl	1.27	37	0	0	<1.27
1,3,5-Trinitrobenzene	0.25	37	0	0	<0.25
2,4,6-trinitrotoluene	0.25	37	0	0	<0.25
Other Analyses					
Nitrate/Nitrite	1.00 [*]	23	1	4	2.58
TPHC	10 [*]	14	6	43	62.8
TOC	40 [*]	2	2	100	6,970

^{*}Limit of detection
^{**}Pace Laboratories

Table 5-9. Sediment Chemical Data Summary

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
Inorganics					
Aluminum	10.7	14	0	0	22,000
Antimony	82.9	14	0	0	<82.9
Arsenic	12.7	14	0	0	<12.7
Barium	4.87	14	0	0	73.9
Beryllium	0.25	14	0	0	1.18
Cadmium	0.427	14	1	7	0.899
Calcium	109	14	3	21	3,850
Chromium	0.974	14	2	14	55.4
Cobalt	2.5	14	0	0	55.8
Copper	3.38	14	1	7	97.6
Cyanide	1.22	15	0	0	<1.22
Iron	12	14	1	7	96,000
Lead	10	14	1	7	45.1
Magnesium	138	14	1	7	1,190
Manganese	0.511	14	1	7	1,400
Mercury	0.087	14	0	0	<0.087
Molybdenum	4	14	0	0	<4
Nickel	7.5	14	0	0	28.9
Potassium	142	14	0	0	846
Selenium	12.4	14	0	0	<12.4
Silver	1.01	13	0	0	<1.01
Sodium	50	14	0	0	91.5
Thallium	12.5	14	0	0	<12.5
Vanadium	2	14	0	0	88.4
Zinc	4	14	1	7	422

Table 5-9. Sediment Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
VOCs					
Acetone	0.045	1	1	100	0.14
Benzene	0.0025	1	0	0	<0.0025
Bromodichloromethane	0.0025	1	0	0	<0.0025
Bromoform	0.0025	1	0	0	<0.0025
Bromomethane	0.0031	1	0	0	<0.0031
Carbon disulfide	0.014	1	0	0	<0.014
Carbon tetrachloride	0.0031	1	0	0	<0.0031
Chlorobenzene	0.0025	1	0	0	<0.0025
Chloroethane	0.003	1	0	0	<0.003
Chloroethene	0.0038	1	0	0	<0.0038
Chloroform	0.0026	1	0	0	<0.0026
Chloromethane	0.035	1	0	0	<0.035
Dibromochloromethane	0.057	1	0	0	<0.057
1,1-Dichlorethane	0.0025	1	0	0	<0.0025
1,2-Dichloroethane	0.0027	1	0	0	<0.0027
1,1-Dichloroethylene	0.32	1	0	0	<0.032
cis-1,2-Dichloroethylene	0.0025	1	0	0	<0.0025
trans-1,2-Dichloroethylene	0.0025	1	0	0	<0.0025
1,2-Dichloropropane	0.0025	1	0	0	<0.0025
cis-1,3-Dichloropropylene	0.003	1	0	0	<0.003
trans-1,3-Dichloropropylene	0.0025	1	0	0	<0.0025
Ethylbenzene	0.0025	1	0	0	<0.0025
Methylene chloride	0.0062	1	0	0	0.0098
Methylethyl ketone	0.0051	1	1	100	0.025
Methylisobutyl ketone	0.019	1	0	0	<0.019

Table 5-9. Sediment Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL ¹ (µg/g)		Number	Frequency (%)	
<i>Methyl-N-butyl ketone</i>	0.018	1	0	0	<0.018
<i>Styrene</i>	0.0025	1	0	0	<0.0025
<i>1,1,2,2-Tetrachloroethane</i>	0.012	1	0	0	<0.012
<i>Tetrachloroethylene</i>	0.0025	1	0	0	<0.0025
<i>1,1,1-Trichloroethane</i>	0.0025	1	0	0	<0.0025
<i>1,1,2-Trichloroethane</i>	0.0025	1	0	0	<0.0025
<i>Trichloroethylene</i>	0.0025	1	0	0	<0.0025
<i>Trifluorochloromethane</i>	0.005	1	0	0	0.0075
<i>Toluene</i>	0.0025	1	0	0	0.0043
<i>Xylenes</i>	0.0075	1	0	0	<0.0075
SVOCs					
<i>Acenaphthene</i>	0.27	1	0	0	<0.27
<i>Acenaphthylene</i>	0.27	1	0	0	<0.27
<i>Anthracene</i>	0.17	1	0	0	<0.17
<i>Benzo[a]anthracene</i>	0.17	1	1	100	0.51
<i>Benzo[a]pyrene</i>	0.24	1	1	100	0.58
<i>Benzo[b]fluoranthene</i>	0.73	1	0	0	<0.73
<i>Benzo[g,h]perylene</i>	0.25	1	0	0	<0.25
<i>Benzo[k]fluoranthene</i>	0.4	1	0	0	<0.4
<i>Benzoic acid</i>	0.92	1	0	0	<0.92
<i>Benzyl alcohol</i>	0.17	1	0	0	<0.17
<i>Bis (2-chloroisopropyl) ether</i>	0.17	1	0	0	<0.17
<i>Bis (2-chloroethyl) ether</i>	1.6	1	0	0	<1.6
<i>Bis (2-chloroethoxy) methane</i>	0.17	1	0	0	<0.17
<i>Bis (2-ethylhexyl) phthalate</i>	0.19	1	0	0	<0.19
<i>4-Bromophenylphenyl ether</i>	0.17	1	0	0	<0.17



Table 5-9. Sediment Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
Butylbenzyl phthalate	0.2	1	0	0	<0.2
4-Chloroaniline	0.33	1	0	0	<0.33
2-Chloronaphthalene	0.33	1	0	0	<0.33
Chlorophenols	0.17	1	0	0	<0.17
4-Chlorophenylphenyl ether	0.2	1	0	0	<0.2
Chrysene	0.27	1	1	100	0.71
Dibenz[a,h]anthracene	0.27	1	0	0	<0.27
Dibenzofuran	0.17	1	0	0	<0.17
1,2-Dichlorobenzene	0.32	1	0	0	<0.32
1,3-Dichlorobenzene	0.58	1	0	0	<0.58
1,4-Dichlorobenzene	0.17	1	0	0	<0.17
3,3'-Dichlorobenzidine	0.66	1	0	0	<0.66
2,4-Dichlorophenol	0.28	1	0	0	<0.28
Diethyl phthalate	0.35	1	0	0	<0.35
2,4-Dimethylphenol	0.33	1	0	0	<0.33
Dimethyl phthalate	0.17	1	0	0	<0.17
Di-N-butyl phthalate	0.51	1	0	0	<0.51
Di-N-octyl phthalate	0.22	1	0	0	<0.22
2,4-Dinitrophenol	1.7	1	0	0	<1.7
Fluoranthene	0.17	1	1	100	0.88
Fluorene	0.17	1	0	0	<0.17
Hexachloreobenzene	0.26	1	0	0	<0.26
Hexachlorobutadiene	0.28	1	0	0	<0.28
Hexachlorocyclopentadiene	1.8	1	0	0	<1.8
Hexachloroethane	0.17	1	0	0	<0.17
Indeno[1,2,3-c,d]pyrene	0.17	1	0	0	1.2

Table 5-9. Sediment Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL ¹ (µg/g)		Number	Frequency (%)	
<i>Isophorone</i>	0.32	1	0	0	<0.32
<i>3-Methyl-4-chlorophenol</i>	0.23	1	0	0	<0.23
<i>2-Methyl-4,6-dinitrophenol</i>	0.84	1	0	0	<0.84
<i>2-Methylnaphthalene</i>	0.17	1	0	0	<0.17
<i>2-Methylphenol</i>	0.17	1	0	0	<0.17
<i>4-Methylphenol</i>	0.18	1	0	0	<0.18
<i>Naphthalene</i>	0.17	1	0	0	<0.17
<i>2-Nitroaniline</i>	0.36	1	0	0	<0.36
<i>3-Nitroaniline</i>	1.7	1	0	0	<1.7
<i>4-Nitroaniline</i>	1.7	1	0	0	<1.7
<i>Nitrobenzene</i>	0.19	1	0	0	<0.19
<i>2-Nitrophenol</i>	0.26	1	0	0	<0.26
<i>4-4-Nitrophenol</i>	2.5	1	0	0	<2.5
<i>N-Nitrosodi-N-propylamine</i>	1.1	1	0	0	<1.1
<i>N-Nitrosodiphenylamine</i>	0.17	1	0	0	<0.17
<i>Pentachlorophenol</i>	0.48	1	0	0	<0.48
<i>Phenanthrene</i>	0.17	1	0	0	0.83
<i>Phenol</i>	0.17	1	0	0	<0.17
<i>Pyrene</i>	0.97	1	0	0	1.4
<i>1,2,4-Trichlorobenzene</i>	0.29	1	0	0	<0.29
<i>2,4,5-Trichlorophenol</i>	0.24	1	0	0	<0.24
<i>2,4,6-Trichlorophenol</i>	0.3	1	0	0	<0.3
Explosives					
<i>1,3-Dinitrobenzene</i>	0.249	17	0	0	<0.249
<i>2,4-Dinitrotoluene</i>	0.251	17	0	0	<0.251
<i>2,6-Dinitrotoluene</i>	0.5	17	0	0	<0.5

Table 5-9. Sediment Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
HMX	0.499	17	0	0	<0.499
Nitroglycerine	2.5	17	0	0	<2.5
2-Nitrotoluene	0.505	17	0	0	<0.505
3-Nitrotoluene	0.251	17	0	0	<0.251
4-Nitrotoluene	0.245	17	0	0	<0.245
Pentaerythritol tetranitrate	2.5	17	0	0	<2.5
RDX	0.51	17	0	0	<0.51
Tetryl	1.27	17	0	0	<1.27
1,3,5-Trinitrobenzene	0.25	17	0	0	<0.25
2,4,6-trinitrotoluene	0.25	17	0	0	<0.25
Pesticides/PCBs					
Aldrin	0.013	1	0	0	<0.013
alpha-Benzenehexachloride	0.0025	1	0	0	<0.0025
beta-Benzenehexachloride	0.0054	1	0	0	<0.0054
delta-Benzenehexachloride	0.0228	1	0	0	<0.0228
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	0.0112	1	0	0	<0.0112
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	0.0142	1	0	0	<0.0142
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	0.0096	1	0	0	<0.0096
alpha-Chlordane	0.004	1	0	0	<0.004
gamma-Chlordane	0.0214	1	0	0	<0.0214
Dieldrin	0.0078	1	0	0	<0.0078
alpha-Endosulfan	0.0047	1	0	0	<0.0047
beta-Endosulfan	0.0071	1	0	0	<0.0071
Endrin	0.0111	1	0	0	<0.0111
Endrin aldehyde	0.0276	1	0	0	<0.0276
Endrin ketone	0.0061	1	0	0	<0.0061

Table 5-9. Sediment Chemical Data Summary (Continued)

ELEMENTS/COMPOUNDS		NUMBER OF RESULTS	RESULTS ABOVE CONTROL SCREENING VALUE		MAXIMUM CONCENTRATION (µg/g)
	CRL** (µg/g)		Number	Frequency (%)	
Endosulfan sulfate	0.013	1	0	0	<0.013
Heptachlor	0.0096	1	0	0	<0.0096
Heptachlor epoxide	0.0039	1	0	0	<0.0039
Lindane	0.02	1	0	0	<0.02
Methoxychlor	0.211	1	0	0	<0.211
PCB 1016	0.04	1	0	0	<0.04
PCB 1221	0.08	1	0	0	<0.08
PCB 1232	0.04	1	0	0	<0.04
PCB 1242	0.04	1	0	0	<0.04
PCB 1248	0.04	1	0	0	<0.04
PCB 1254	0.04	1	1	100	0.21
PCB 1260	0.04	1	0	0	<0.04
Toxaphene	0.2	1	0	0	<0.2
Other Analyses					
Nitrate/Nitrite	1.00*	8	1	12	2.07
TPHC	10*	2	2	100	110
TOC	40*	2	2	100	9,230

*Limit of Detection - No "CRL" for these methods
**Pace Laboratories

5.3 FIELD INVESTIGATIONS

This section presents a discussion, on a SWMU-by-SWMU basis, of investigations and sampling activities that were conducted, and the results of laboratory analyses that were reported for collected samples. Only analytical results that exceeded control screening values (listed in Tables 5-1 through 5-4) are presented for each SWMU.

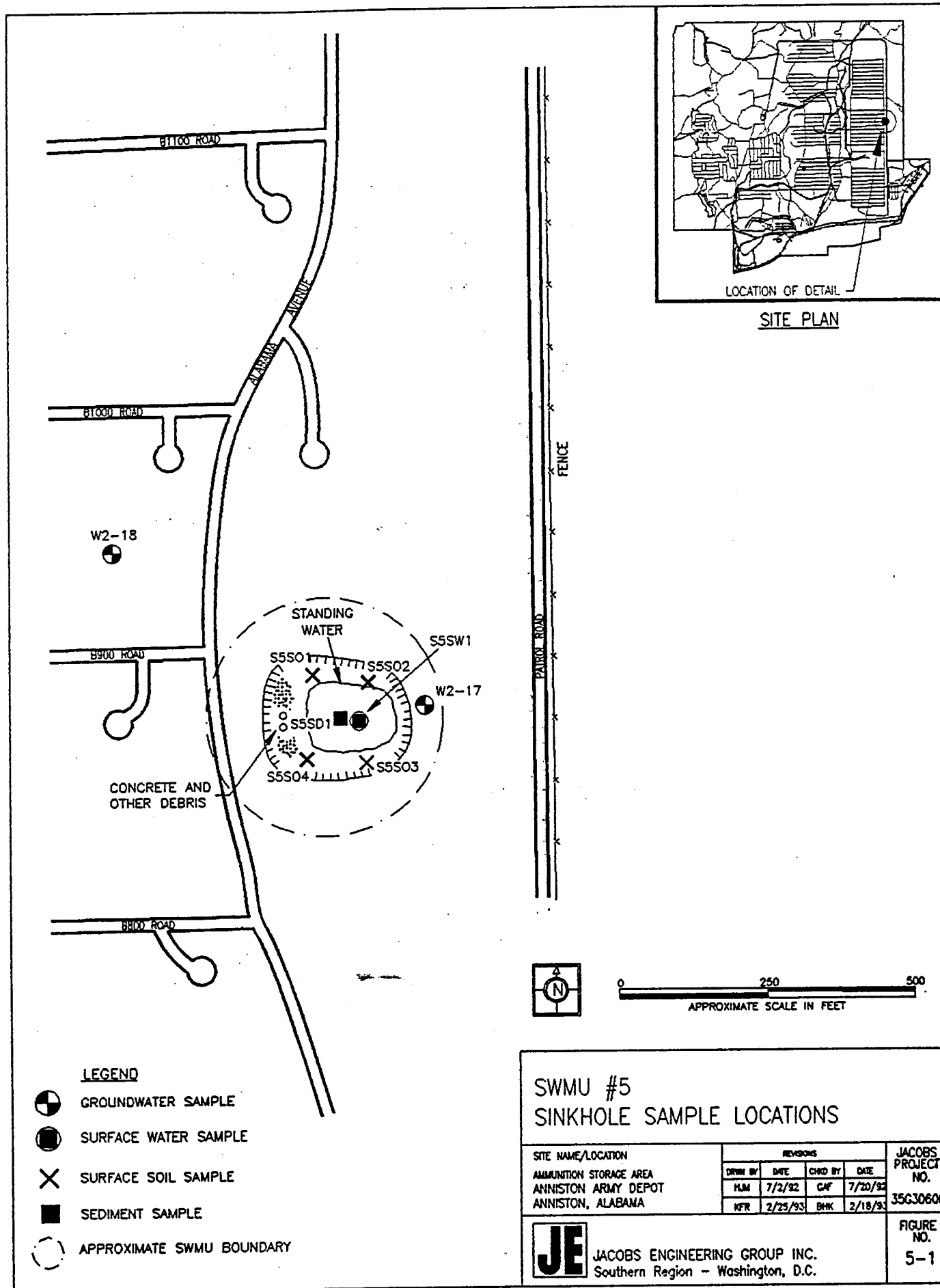
5.3.1 SWMU #5 — Sinkhole

Limited environmental media sampling had been conducted in previous investigations. Historical chemical analysis data are available for a few metals and organic chemicals from previous surface water and sediment sampling activities. Chromium, manganese, and strontium were detected in surface water samples collected from the Sinkhole in December 1981. Chromium, mercury, and nickel were detected in a sediment sample collected during the same sampling campaign. Traces of organic chemicals were also detected in the sediment sample. Historical groundwater data provide a listing of a greater number of metals and organic compounds.

Disposal of wastes containing contaminants other than those found in previous investigations may have taken place over the years of ANAD operations (ESE, 1989). Therefore, selected environmental media samples collected for the ESI from SWMU #5 were analyzed for parameters that included inorganics, VOCs, SVOCs, pesticides/PCBs, and explosives.

Construction debris, railroad ties, and other miscellaneous municipal-type wastes such as discarded telephones, containers, etc. were found in the sinkhole during the ESI. Also, during ESI field activities, the wall and rim of the Sinkhole were noted to be well-vegetated and showed no signs of recent disturbance. No swallett openings were discovered either by visual observation or by systematically probing the bottom of the sinkhole with a hand auger.

5.3.1.1 Investigative Activities. Four surface soil samples, one sediment sample, one surface water sample, and groundwater samples from two existing monitoring wells were collected at SWMU #5. The sample locations are identified in Figure 5-1. A summary of chemical analysis of the samples is presented in Table 5-10.



5.3.1.2 Results of Investigation.

Surface Soil Samples — Four surface soil samples were collected at SWMU #5. Identified as S5S01, S5S02, S5S03, and S5S04, these samples were analyzed for inorganics and explosives. Sample S5S04 was also analyzed for pesticides/PCBs, VOCs and SVOCs. Explosives and organics were not detected in any of the samples. All detections above control screening values were inorganics, and are tabulated in Table 5-10. These include aluminum, barium, beryllium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc.

Sediment Samples — One sediment sample was collected 6 inches below the surface water/sediment interface in the sinkhole. Identified as S5SD1, this sample was analyzed for VOCs, SVOCs, inorganics, explosives, and pesticides/PCBs. Contaminants in the sediment sample detected above control screening values are tabulated in Table 5-10. Cyanide and explosives were not detected in the sample. PCB 1254 was detected in the sediment sample at a concentration of 0.21 µg/g. The VOCs acetone and methylethyl ketone, as well as the SVOCs benzo(a)anthracene, benzo(a)pyrene, chrysene, and fluoranthene were detected in trace concentrations. Calcium and zinc are the only inorganics reported at concentrations above control screening values.

Groundwater Samples — Groundwater samples were collected from existing groundwater monitoring wells W2-17 and W2-18. Samples were analyzed for VOCs, SVOCs, inorganics, explosives, and pesticides/PCBs. Potential contaminants are listed in Table 5-10.

Surface Water Samples — One surface water sample (S5SW1) was collected from the standing water located in the sinkhole. Samples were analyzed for VOCs, SVOCs, inorganics, pesticides/PCBs, and explosives. Analytical results are presented in Table 5-10. All contaminants detected at concentrations above control screening values are inorganics.



Table 5-10. SWMU #5 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ANALYTE/ COMPOUND	CONCENTRATION (µg/g)
SEDIMENT	S5SD1	0.5	Calcium	3,850
			Zinc	422
			PCB 1254	0.21
			Benzo[a]anthracene	0.51
			Benzo[a]pyrene	0.58
			Chrysene	0.71
			Fluoranthene	0.88
			Acetone	0.14
			Methylethyl ketone	0.025
SURFACE SOIL	S5S01	0.5	Calcium	1,760
			Chromium	51.6
			Copper	33.9
			Iron	47,000
			Vanadium	83.4
			Zinc	221
	S5S02	0.5	Aluminum	41,000
			Barium	102
			Beryllium	1.01
			Calcium	2,210
			Chromium	46.5
			Cobalt	42.5
			Copper	35.1
			Iron	51,000
			Manganese	1,400
			Nickel	25.5
			Potassium	1,340
			Vanadium	83.3
			Zinc	220

Table 5-10. SWMU #5 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ANALYTE/ COMPOUND	CONCENTRATION (µg/g)
SURFACE SOIL	S5S03	0.5	Aluminum	56,000
			Barium	123
			Beryllium	1.04
			Calcium	6,000
			Chromium	101
			Cobalt	42
			Copper	37.6
			Iron	39,000
			Lead	338
			Magnesium	1,480
			Manganese	2,700
			Nickel	30.6
			Potassium	1,750
			Vanadium	80.5
			Zinc	155
SURFACE SOIL	S5S04	0.5	Aluminum	37,000
			Barium	161
			Beryllium	1.02
			Calcium	1,770
			Cobalt	32.1
			Copper	21.6
			Manganese	2,700
			Potassium	1,300
			Zinc	95.6

Table 5-10. SWMU #5 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ANALYTE/ COMPOUND	CONCENTRATION (µg/l)
GROUNDWATER	W2-18	49		
			<i>Beryllium</i>	3.22
			<i>Cobalt</i>	433
			<i>Iron</i>	99,000
			<i>Lead</i>	137
			<i>Nickel</i>	128
			<i>Vanadium</i>	102
	W2-17	38	<i>Calcium</i>	38,400
			<i>Potassium</i>	12,300
SURFACE WATER	S5SW1	0	<i>Aluminum</i>	111
			<i>Barium</i>	188
			<i>Calcium</i>	130,000
			<i>Iron</i>	481
			<i>Magnesium</i>	12,200
			<i>Manganese</i>	1,010
			<i>Potassium</i>	20,200
			<i>Sodium</i>	2,810
			<i>Zinc</i>	450

5.3.2 SWMU #8 — Acid Disposal Pit

Previous investigations reported uncertainty about the location of this SWMU. Visual inspections of the suspected SWMU #8 location identified in the ESI Work Plan were conducted by a Jacobs geologist on three occasions. These inspections were focused on the area between the railroad tracks east of Building 611 and Benecia Avenue, west and north of storage igloo CV-809. Two inspections were made in December 1991 prior to conducting geophysical surveys of the area. The third inspection was conducted with an observer from USATHAMA in February 1992 prior to collecting environmental samples.

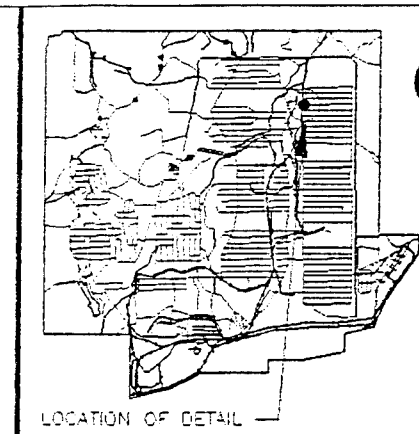
No evidence was observed that would indicate the presence of a buried concrete-lined pit or that heavy equipment operations associated with burial activity had occurred in that area. The inspected area was covered mainly with pine trees as large as 18 inches in diameter, briary undergrowth, and grass. Several small earthen mounds and a bulldozer cut across the creek were observed in the area immediately west of igloo C-809. A former roadbed and dilapidated wooden bridge abutment were located at the northern end of the investigated area north of the igloo. The northwest portion of the inspected area was covered by a large pile of bauxite (aluminum ore).

Although no surficial evidence for SWMU #8 was observed during the first two visual inspections, geophysical survey grids were established at two locations on the site (shaded areas marked on Figure 5-2). The rationale for proceeding with the geophysical surveys was based on rapid pine tree growth rate and a possibility that these trees and other vegetation may have obscured any surface evidence of the buried SWMU. It was expected that sufficient contrast in conductivities would be observed between native soils and the drums, sand, and concrete associated with the pit. The bauxite pile was excluded from the survey because the material would probably mask contrasts in conductivity of any features buried beneath the pile.

5.3.2.1 Investigative Activities. Geophysical surveys were conducted at SWMU #8 in December 1991 using magnetometry and electromagnetics. Mounds of earth observed during the visual inspection were screened with the magnetometer for any indication of buried metal objects prior to running the electromagnetic (EM) surveys. No magnetometer readings were observed that would suggest buried metal (drums, reinforcing rod, etc.) beneath the earthen mounds. EM surveys of the gridded areas also showed no indication of a buried pit, although two anomalies of high conductivity are shown in the grid 8B EM survey results. Results of the EM surveys are presented in Appendix C.

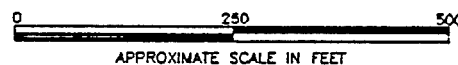
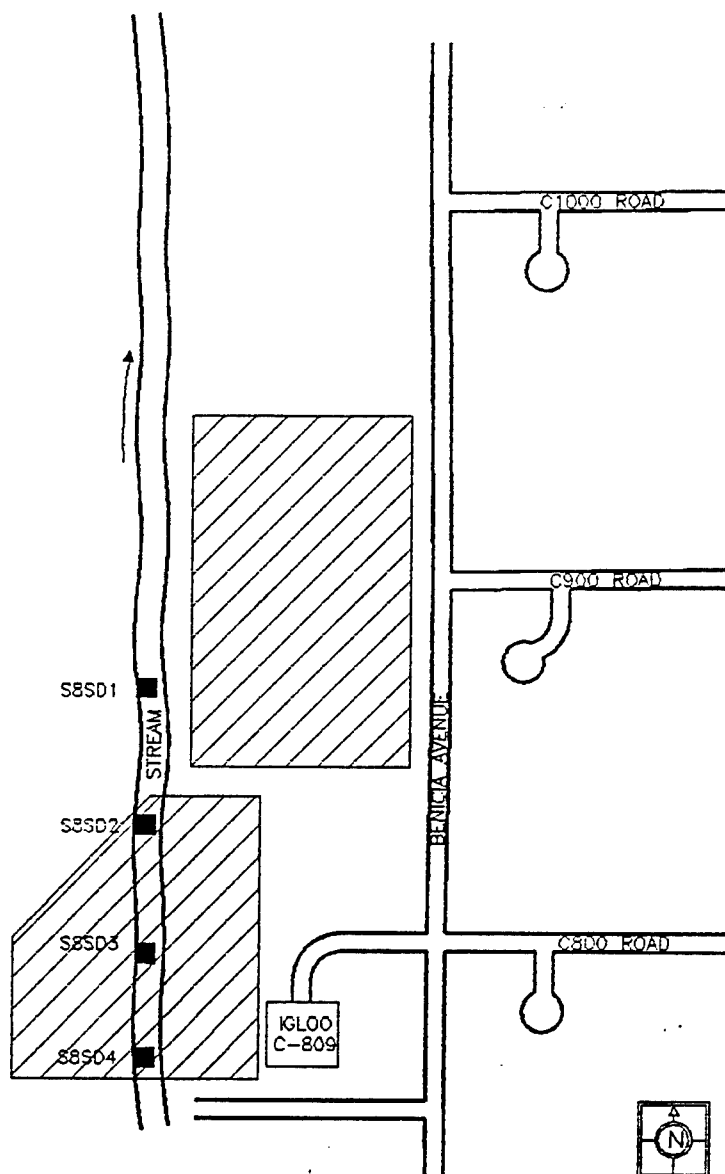
Because SWMU #8 was not positively located in the geophysical surveys, soil borings, groundwater monitoring wells, and surface soil sampling points could not be located in an area potentially affected by reported contaminants with any degree of confidence. The drilling and soil sampling programs for SWMU #8 were suspended by a representative of USATHAMA, with concurrence of a representative from EPA Region IV.

At the direction of USATHAMA, sediment sampling sites were located at four areas along the stream west of C-809. Samples S8SD1 and S8SD4 were collected at stream level. Samples S8SD2 and S8SD3 were collected approximately two feet above stream level where seeps of groundwater were noted in the stream bank. These sediment samples were submitted for analysis of inorganics and explosives. Sample locations for SWMU #8 are identified in Figure 5-2. These samples were used for establishing control screening values for sediments. There were no explosives or cyanide detected.



LOCATION OF DETAIL

SITE PLAN



LEGEND



SEDIMENT SAMPLE



SUSPECTED SWMU LOCATION
(BASED ON ESE INSTALLATION
ASSESSMENT, 1978)

SWMU #8 ACID DISPOSAL PIT SAMPLE LOCATIONS

SITE NAME/LOCATION

AMMUNITION STORAGE AND SERVICE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS

ORWN BY	DATE	CHGD BY	DATE
HJM	7/2/92	GAF	7/20/92
KFR	2/25/93	BHK	2/18/93

JACOBS
PROJECT
NO.

35G30500



JACOBS ENGINEERING GROUP INC.
Southern Region - Washington, D.C.

FIGURE
NO.

5-2

5.3.2.2 Additional Investigations. Stereo pair aerial photographs of ANAD were obtained by Jacobs in late spring 1992 after the ESI field work was completed. Aerial photographs from 1944, 1948, 1952, 1957, 1959, and 1961 as well as enlargements of the 1957 and 1961 aerial photos were carefully examined for evidence of activity which might be related to anomalies recorded in the geophysical survey. The photographs show no evidence of an open pit or concrete lagoon in vicinity of either of the areas investigated during the geophysical surveys. The photographs sufficiently cover the time period that the Acid Disposal Pit was reportedly used.

The area investigated in the SWMU #8 survey appears to have been sparsely covered with trees in 1944 photographs. A linear feature running east/west at the approximate location of the anomaly in the geophysical survey can be seen in the stereo pair. Because the feature is covered with grass or low vegetation, it may be either an excavation made before ANAD was constructed, or an excavation made while C-block was being constructed. This linear feature passes under the former roadbed which is visible in all the photos examined.

It is probable that the anomaly of high conductivity in the northeast corner of the #8 area is associated with backfill materials used to raise the Benecia Avenue roadbed. Most of the roads in this section of the ASA are elevated approximately 6 to 10 feet above natural ground level. The eastern line of the geophysical survey is located at the base of the road berm approximately 10 to 12 feet from the pavement.

The SWMU #8 area was revisited by representatives from AEC, ADEM, ANAD, and Jacobs in April 1993. An original photograph of the "Old Acid Disposal Pit" from the Installation Assessment Report (USATHAMA, 1978) was provided by the AEC representative prior to the site visit. The original photograph shows a large red metal box and metal fence posts lying on the ground in the area where SWMU #8 is reportedly located. (The original photograph was not previously available for review during the ESI field investigation of SWMU #8; the quality of the copies of the photograph included in the 1978 report is insufficient to show any of the crucial details.)

The metal box (approximately 4 feet x 4 feet x 6 feet) and fence posts were located during reinspection of the site. They were approximately 150 feet southeast of building 635 near the edge of a wooded area between the bauxite stockpile railroad siding and the railroad tracks east of building 611. The metal box was reported to be a chemical weapons disposal coffin from Operation CHASE (Cut Holes And Sink 'Em). The box was labelled as "Inert" and dated circa 1971. Aerial photographs from 1957 and 1961 show a square-roofed structure located in the area in which the box was found. No evidence of an open pit was observed in the photographs. If it exists, the "Old Acid Disposal Pit" (SWMU #8) may have been covered by a roof to prevent rainfall from filling the pit and washing away the contents.

5.3.2.3 Results of Investigation. Since SWMU #8 was not located, the analytical results obtained from samples collected during the ESI are not reported here. This is because they do not contribute to assessment of any contaminant releases from the actual SWMU. As discussed above, the sediment sample data have been used to support definition of control screening values in the ASA.

5.3.3 SWMU #10 — TNT Washout Facility

Limited environmental media sampling has been conducted during previous investigations of SWMU #10. Historical chemical data show traces of explosive compounds detected in groundwater samples from wells AAD13 and AAD15 during a sampling campaign (circa 1980). Relatively high concentrations of explosive compounds were detected in groundwater samples from AAD14 (ESE, 1981). TNT, octol, RDX, HMX, Comb B, and explosive compound degradation products (dinitrotoluenes, nitrophenols, and cresols) are the common contaminants associated with waste water from TNT washout operations (ESE, 1989).

5.3.3.1 Investigative Activities. On the basis of previous investigations, the SWMU #10 area was inspected in November 1991 by Jacobs representatives and personnel from the ANAD Safety Office to assure that drilling and sampling sites were safe from potential explosive hazards. Prior to the start of drilling, additional requirements for chemically field screening subsurface soils for explosive compounds TNT and RDX were given to Jacobs by a representative from the USATHAMA Safety Office. Intrusive sampling within the sedimentation tank and Building 172 was not permitted because of an explosion hazard. There were no restrictions on surface soil sampling.

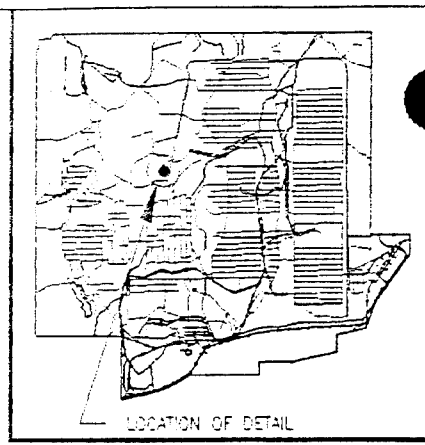
Difficult drilling conditions were encountered at SWMU #10 soil boring sites. Monitoring well 91B11 was completed after five attempts to drill. Conditions causing auger refusal were encountered at three of the aborted 91B11 drilling sites. A core-sampling tool was lost down the borehole on the fourth drilling attempt. In most cases, subsurface soil samples from failed drilling attempts were placed into drums for disposal with cuttings from the boring.

Subsurface soil samples from two soil borings, two surface soil samples, two sediment samples, and groundwater samples from two monitoring wells (91B11 and AAD13) were collected and submitted to the laboratory. Samples were analyzed for selected parameters that included inorganics, nitrate/nitrite, TOC, and explosives. Sample locations for SWMU #10 are identified in Figure 5-3. A summary of detections above background is presented in Table 5-11.

5.3.3.2 Results of Investigation.

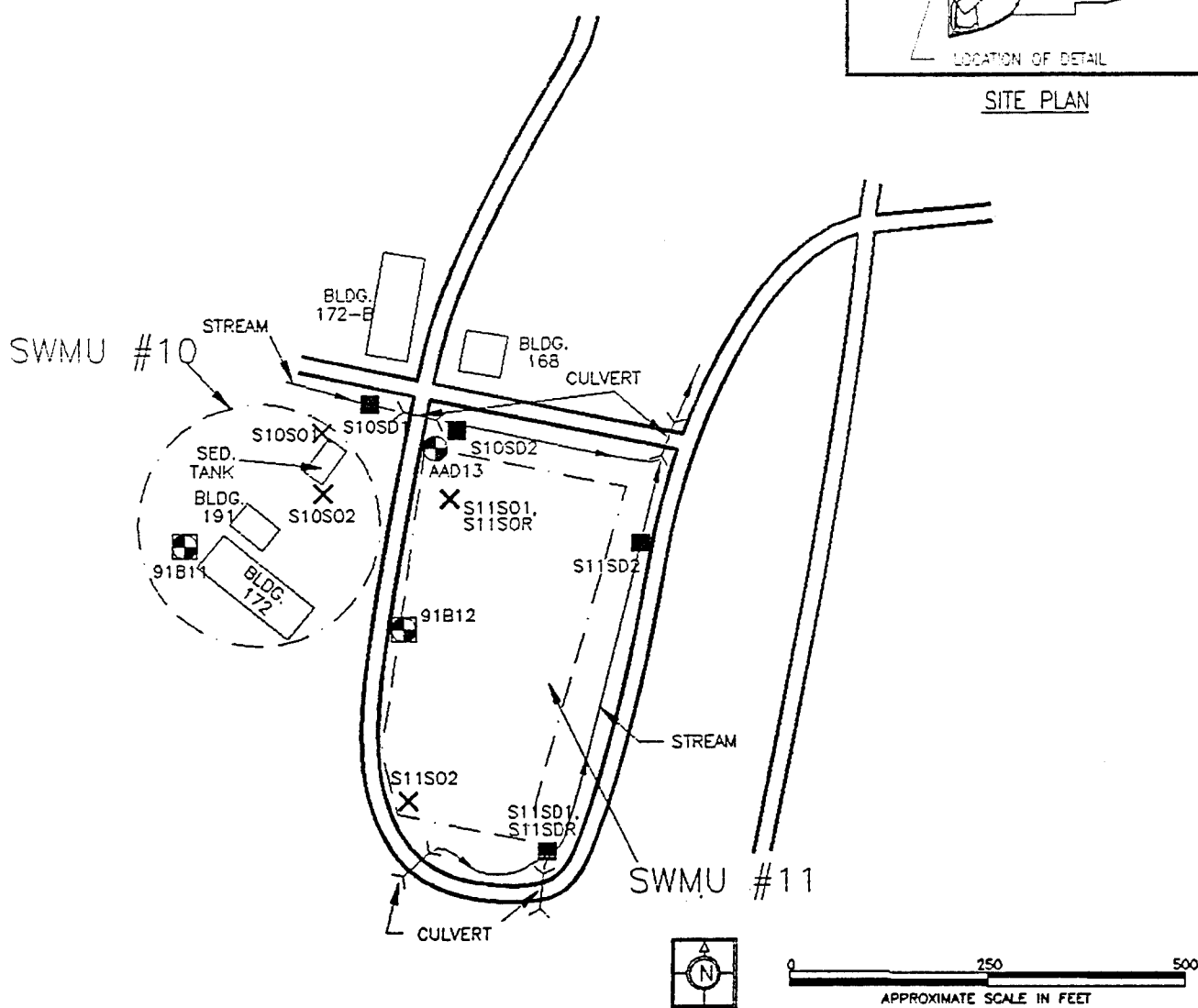
Surface Soil Samples — Two surface soil samples were collected at SWMU #10. Identified as S10S01 and S10S02, these samples were analyzed for inorganics, explosives, nitrate/nitrite, and TOC. Sample S10S01 was selected to be one of the control samples. Chemicals detected above control screening values in sample S10S02 are tabulated in Table 5-11. The only inorganic detected above control screening values was calcium. Nitrate/nitrite was detected at 4.14 µg/g. The explosive 2,4,6-trinitrotoluene was detected at 1.28 µg/g.





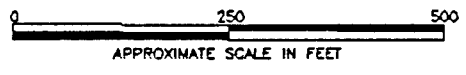
LOCATION OF DETAIL


SITE PLAN



LEGEND

- GROUNDWATER/SOIL BORING SAMPLE
- GROUNDWATER SAMPLE
- SURFACE SOIL SAMPLE
- SEDIMENT SAMPLE
- APPROXIMATE SWMU BOUNDARY



SWMU #10 & #11 TNT WASHOUT FACILITY SEDIMENTATION TANK AND LEACHING BEDS SAMPLE LOCATIONS					JACOBS PROJECT NO. 35G3066	
SITE NAME/LOCATION		REVISIONS				
AMMUNITION STORAGE AREA		DRWN BY	DATE	CHKD BY		DATE
ANNISTON ARMY DEPOT		HJM	7/2/92	GAF		7/20/92
ANNISTON, ALABAMA		KFR	2/25/93	BHK		2/25/93
 JACOBS ENGINEERING GROUP INC. Southern Region - Washington, D.C.					FIGURE NO. 5-3	

Soil Boring Samples — Two soil borings, identified as 91B11C, and 91B11D were drilled successfully into the area near SWMU #10. Eleven soil samples were collected from these borings. Five soil samples were collected from borehole 91B11C at the following depths: 0, 10, 15, 20 and 30 feet. Six samples were collected from borehole 91B11D at the following depths: 0, 5, 10, 22.5, 25, and 35 feet. The soil samples were analyzed for inorganics, explosives, nitrate/nitrite, and TOC. Analytical results above control screening values are included in Table 5-11.

The soil boring samples were found to contain concentrations of TOC, chromium, potassium, and sodium above control screening values.

Sediment Samples — Two sediment samples, identified as S10SD1 and S10SD2, were collected from SWMU #10 at 6 inches below the surface water/sediment interface and were analyzed for inorganics, explosives, nitrate/nitrite, and TOC. The analytical results for the sediment samples are included in Table 5-11.

Sample S10SD1 contained 3,680 µg/g of TOC and sample S10SD2 contained 2.07 µg/g of nitrate/nitrite. Calcium was detected in S10SD2 at a concentration of 663 µg/g.

Groundwater Samples — Two groundwater samples were collected from monitoring wells located in the area of SWMU #10. One sample was collected from the monitoring well installed in borehole 91B11, and one sample was collected from a pre-existing monitoring well identified as AAD13. The samples were analyzed for inorganics, nitrate/nitrite, VOCs and explosives. The analytical results are presented in Table 5-11.

The majority of the contaminants detected above control screening values in the samples were inorganics. Aluminum, sodium, and vanadium were all detected at concentrations greater than control screening values in sample 91B11, and zinc was detected at a concentration greater than the control screening value in sample AAD13. Both samples contained nitrate/nitrite, with a concentration of 320 µg/l in sample 91B11 and 271 µg/l in sample AAD13. Both sample 91B11 and AAD13 contained RDX at concentrations of 4.56 µg/l and 40.6 µg/l, respectively. Sample AAD13 also contained 86 µg/l of HMX.

Table 5-11. SWMU #10 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SEDIMENT	S10SD1	0.5	TOC	3,680
	S10SD2	0.5	Nitrate/Nitrite	2.07
			Calcium	663
SURFACE SOIL	S10S02	0.5	Nitrate/Nitrite	4.14
			Calcium	1,910
			2,4,6-Trinitrotoluene	1.28
SOIL BORING	91B11C	0	TOC	772
		10	Chromium	70.8
			Sodium	152
	91B11D	0	Potassium	824
		5	TOC	6,970
			Potassium	819
GROUNDWATER	91B11	23	Nitrate/Nitrite	320
			Aluminum	31,600
			Sodium	38,400
			Vanadium	109
			RDX	4.56
	AAD13	25	Zinc	1,070
			Nitrate/Nitrite	271
			HMX	86
			RDX	40.6

5.3.4 SWMU #11 — TNT Washout Facility Leaching Beds

Contaminants of concern observed from previous sample analyses conducted for SWMU #11 are similar to those found at SWMU #10. Historical chemical data show traces of explosive compounds detected in groundwater samples from wells AAD13 and AAD15 during a sampling campaign (circa 1980). Relatively high concentrations of explosive compounds were detected in groundwater samples from AAD14 (ESE, 1981). Also, there is a 3 to 4 foot thick layer of explosive-contaminated soil beneath the clay cover installed in 1985 (USAEHA, 1986). Surface samples were collected from this layer by ANAD Safety personnel just prior to the installation of the clay layer. Analysis of the samples revealed explosives concentrations of up to 60% (ANAD-Safety, 1985). Based on these findings, samples collected at this SWMU were analyzed for inorganics, nitrate/nitrite, TOC, and explosives. Soil samples from one boring, three surface soil samples, three surface sediment samples, and groundwater samples were collected and analyzed. All samples were collected outside the bed area except for the surface soils, which were collected from the top of the cover.

5.3.4.1 Investigative Activities. On the basis of previous investigations, the SWMU #11 area was inspected in November 1991 by Jacobs representatives and personnel from the ANAD Safety Office to assure that drilling and sampling sites were safe from potential explosive hazards. Prior to the start of drilling, additional requirements for field screening subsurface soils for explosive compounds TNT and RDX were given to Jacobs by a representative from the USATHAMA Safety Office. Intrusive (subsurface) soil sampling within the SWMU boundary was not permitted because of an explosion hazard. There were no restrictions on surface soil sampling down to six inches within the SWMU #11 boundary.

Difficult drilling conditions were encountered at SWMU #11 soil boring sites. Monitoring well 91B12 was completed after three attempts to drill. In the first attempt, auger refusal was caused by a dolomite boulder at a depth of approximately



10 feet. On the second attempt, the explosive compound tetryl was detected in surface soils during field screening, and the drilling site was rejected. On the third attempt, the well was completed despite an organic vapor detection of 28 ppm at 50 to 55 feet. See Section 6.1 for additional discussion of this detection.

Collecting groundwater samples from five existing monitoring wells at SWMU #11 was called for in the ESI Work Plan. Only one of the existing monitoring wells (AAD 13) was actually sampled. Two wells (W2-19 and W2-20) were not located by the sampling team. Wells AAD14 and AAD15 were uncapped, damaged, and considered unreliable for sampling due to their condition.

Three surface soil and three sediment samples were collected from the leaching bed area. Sample locations for SWMU #11 are identified in Figure 5-3. A data summary of chemicals detected above background is presented in Table 5-12.

5.3.4.2 Results of Investigation.

Soil Boring Samples — A soil boring identified as 91B12 was drilled near SWMU #11 (Figure 5-3). Six soil samples were collected from the boring at depths of 5, 10, 15, 20, 25 and 32 feet. The samples were analyzed for inorganics, TOC, explosives, and nitrate/nitrite. The analytical results are presented in Table 5-12.

Cyanide and explosives were not detected in any of the samples. Nitrate/nitrite was detected at a concentration of 2.58 µg/g.

Surface Soil Samples — Two surface soil samples, identified as S11S01 and S11S02, were collected from SWMU #11 at 6 inches below ground surface. The samples were analyzed for inorganics, explosives, nitrate/nitrite, and TOC. The analytical results for detections above control screening values are presented in Table 5-12.

Cyanide, explosives, and nitrate/nitrite were not detected in any of the samples. Copper was the only inorganic detected in both samples at concentrations greater than the control screening value. In addition, potassium was detected above its control screening value in sample S11S01.

Sediment Samples — Two sediment samples, identified as S11SD1 and S11SD2 were collected at 6 inches below the surface water/sediment interface. These samples were analyzed for inorganics, explosives, nitrate/nitrite, and TOC. The analytical results of the sediment samples are presented in Table 5-12.

Cyanide, explosives, and nitrate/nitrite were not detected in any of the samples. TOC was detected in sample S11SD2 at a concentration of 9,230 µg/g. Manganese was detected in S211D1 at a concentration of 1,400 µg/g.

Groundwater Samples — One groundwater sample was collected from the monitoring well installed in borehole 91B12 (upgradient). The sample was analyzed for inorganics, nitrate/nitrite, explosives, and VOCs. The analytical results are presented in Table 5-12.

The following inorganics were detected in the sample at concentrations greater than control screening values: aluminum, cobalt, chromium, sodium, and vanadium. The VOC acetone was detected in the sample at 21 µg/l.

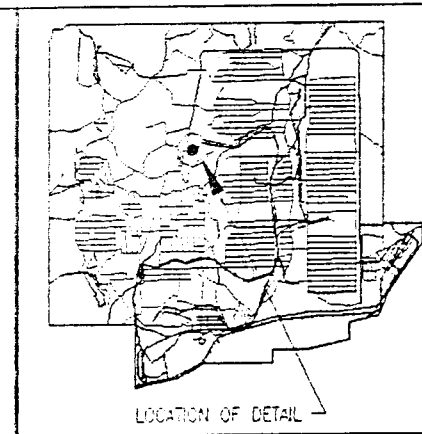
Table 5-12. SWMU #11 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SEDIMENT	S11SD1	0.5	Manganese	1,400
	S11SD2	0.5	TOC	9,230
SURFACE SOIL	S11S01	0.5	Copper	30.3
			Potassium	1,110
	S11S02	0.5	Copper	20.8
SOIL BORING	91B12	25	Nitrate/Nitrite	2.58
GROUNDWATER	91B12	45	Aluminum	26,400
			Cobalt	50.7
			Chromium	113
			Sodium	9,910
			Vanadium	94
			Acetone	21

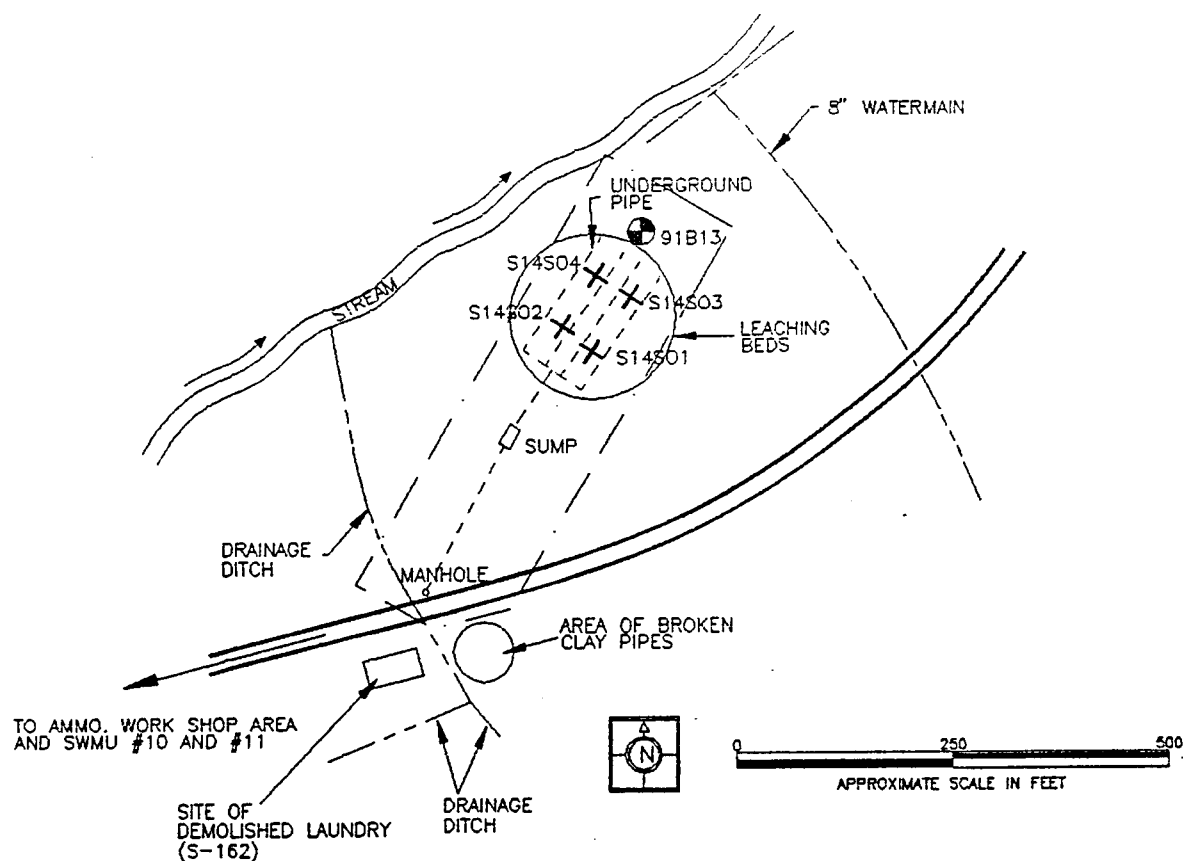
5.3.5 SWMU #14 — Laundry Waste Leaching Facility

No historical environmental sampling data exists for the Laundry Waste Leaching Facility. Possible contaminants of concern at SWMU #14 include soap, lye, TNT, DNT, and cresols. A suite of analyses was selected for samples collected from SWMU #14 that include inorganics, TOC, and explosives.

5.3.5.1 Investigative Activities. The SWMU #14 area was inspected in December 1991 by a Jacobs geologist and members of the UXO team from UXB International. Iron piping was located which led from the site of the demolished laundry building to a manhole across the road (see Figure 5-4). From the manhole, the pipe was traced to a concrete sump. The pipe was then traced to a junction box at the head of a raised gravel area approximately 30 feet wide and 75 feet long. Lateral pipes were located with a magnetometer by the UXO specialists and marked at each pipe joint. An area of broken terra cotta piping was observed south of the road. This area was reported as a possible leaching bed area.



SITE PLAN



LEGEND



GROUNDWATER SAMPLE



SURFACE SOIL SAMPLE



APPROXIMATE DIRECTION OF FLOW



APPROXIMATE SWMU BOUNDARY

NOTE: WELL AND SOIL SAMPLES IN WOODED AREA.

**SWMU #14
LAUNDRY WASTE LEACHING FACILITY
SAMPLE LOCATIONS**

SITE NAME/LOCATION

AMMUNITION STORAGE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS

DRWN BY	DATE	CHKD BY	DATE
HJM	7/2/92	CAF	7/20/92
KFR	2/25/93	BH-K	2/17/93

JACOBS
PROJECT
NO.

35G30600



JACOBS ENGINEERING GROUP INC.
Southern Region - Washington, D.C.

FIGURE
NO.

5-4

Drilling inside the boundary of the gravel bed was prohibited due to safety concerns by the ANAD Safety Officer. Additional requirements for chemically field screening subsurface soils for explosive compounds TNT and RDX during drilling operations were given to Jacobs by a representative from the USATHAMA Safety Office. A monitoring well location was selected at the downgradient end of the gravel bed approximately 15 feet from the end of the lateral pipes.

Four surface soil samples and one groundwater sample from one new monitoring well were collected and analyzed. The sample locations for SWMU #14 are identified in Figure 5-4 and the data summary of analyte detections above control screening values are presented in Table 5-13.

5.3.5.2 Results of Investigation.

Surface Soil Samples — Four surface soil samples, identified as S14S01, S14S02, S14S03, and S14S04, were collected from SWMU #14. The samples were analyzed for inorganics, explosives, and TOC. The analytical results are presented in Table 5-13.

Cyanide was not detected in any of the samples. TOC was not detected above the control screening value in any of the samples. Inorganics detected above control screening values in sample S14S01 were limited to copper; in sample S14S02, iron; and in sample S14S04, copper, molybdenum, and zinc. No inorganics were detected above control screening values in sample S14S03. The explosive compound HMX was detected in sample S14S01 at 1.01 µg/g.

Groundwater Samples — A groundwater sample was collected from monitoring well 91B13 (upgradient). The sample was analyzed for inorganics, explosives, and TOC. The analytical results are presented in Table 5-13. Cyanide and explosives were not detected in the samples. TOC was detected in the sample.



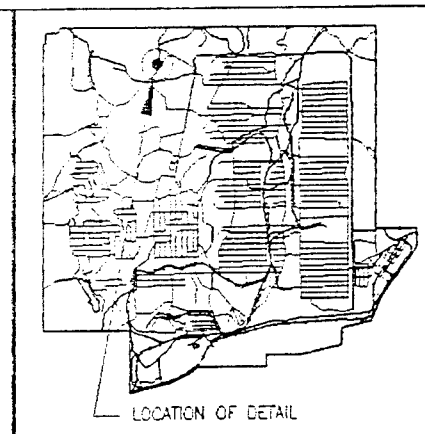
Table 5-13. SWMU #14 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SURFACE SOIL	S14S01	0.5	Copper	20.4
			HMX	1.01
	S14S02	0.5	Iron	69,000
	S14S04	0.5	Copper	30
			Molybdenum	8.46
			Zinc	92.2
GROUNDWATER	91B13	15	TOC	3,150

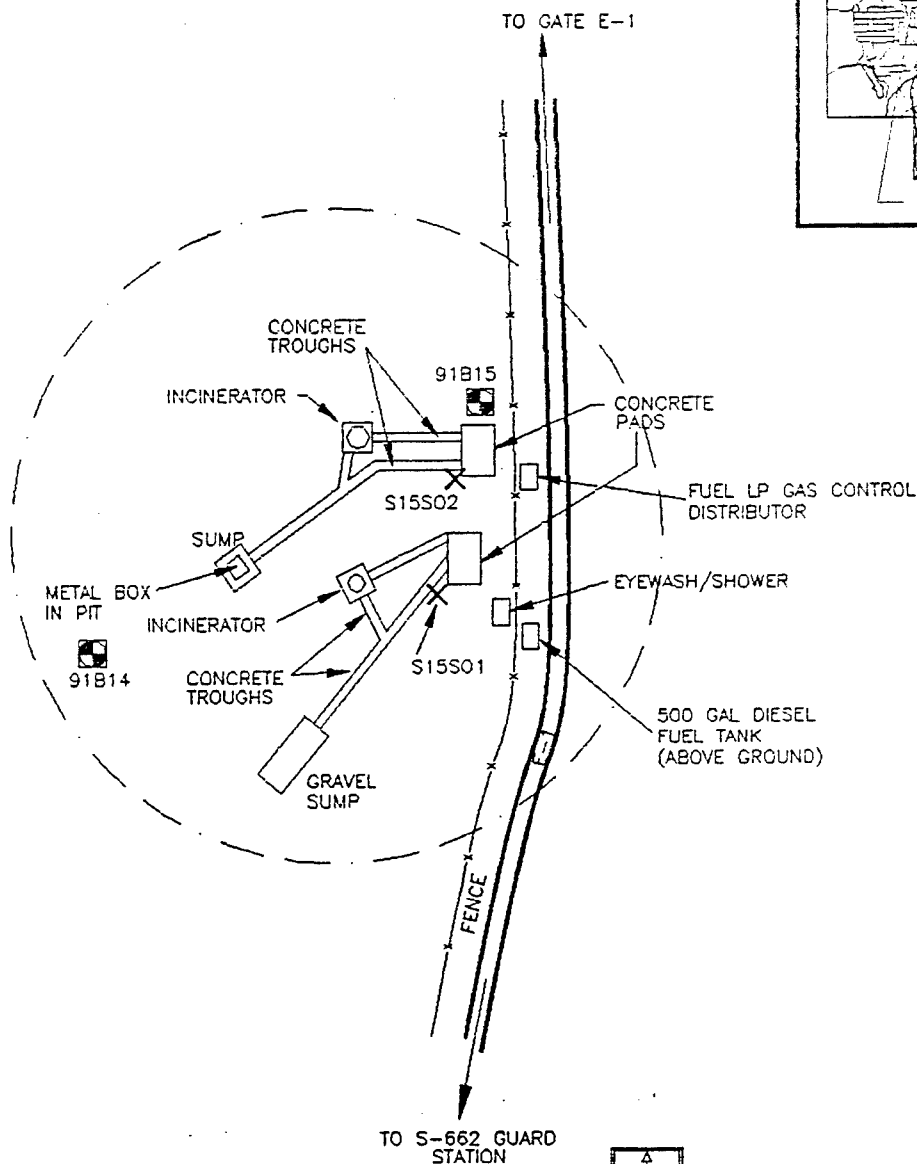
5.3.6 SWMU #15 — Propellant Disposal Facility

No historical environmental sampling data exists for the Propellant Disposal Facility. Possible contaminants of concern at SWMU #15 include unsymmetrical dimethylhydrazine (UDMH), inhibited red fuming nitric acid (IRFNA), diesel fuel, and inorganics. Surface soil samples were analyzed for TPHC; soil boring samples were analyzed for TPHC and nitrate/nitrite; and groundwater samples were analyzed for nitrate/nitrite, VOCs, and SVOCs.

5.3.6.1 Investigative Activities. Subsurface soil samples from two soil borings, two surface soil samples, and groundwater samples from the two new monitoring wells were collected and analyzed. The sample locations for SWMU #15 are identified in Figure 5-5. A summary of chemicals detected above control screening values are presented in Table 5-14.



SITE PLAN



0 50 100
APPROXIMATE SCALE IN FEET

LEGEND



GROUNDWATER/SOIL BORING SAMPLE



SURFACE SOIL SAMPLE



APPROXIMATE SWMU BOUNDARY

NOTE: FIGURE 5-5 IN THE WORK PLAN IS INCORRECT

SWMU #15
PROPELLANT DISPOSAL FACILITY
SAMPLE LOCATIONS

SITE NAME/LOCATION

AMMUNITION STORAGE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS

DRAWN BY	DATE	CHD BY	DATE
KJM	7/2/92	CAF	7/20/92
KFR	2/25/93	BHK	2/18/93

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NO.

35G30600



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FIGURE
NO.

5-5

5.3.6.2 Results of Investigation.

Soil Boring Samples — Two soil borings, identified as 91B14 and 91B15, were drilled at SWMU #15. Three soil samples were collected from 91B14 at approximately 5 foot intervals ranging from 5 to 15 feet. Two soil samples were collected from 91B15 at 5 and 9 feet. The samples were analyzed for nitrate/nitrite and TPHC. The analytical results are presented in Table 5-14. Nitrate/nitrite were not detected in any of the samples. TPHC was detected in sample 91B14 and 91B15 at concentrations of 20.9 µg/g and 12.2 µg/g, respectively.

Surface Soil Samples — Two surface soil samples, identified as S15S01 and S15S02, were collected from SWMU #15. The samples were analyzed for TPHC. The analytical results are presented in Table 5-14. TPHC was detected in sample S15S01 and S15S02 at concentrations of 28.3 µg/g and 108 µg/g, respectively.

Groundwater Samples — Two groundwater samples were collected from monitoring wells 91B14 (downgradient) and 91B15 (upgradient). The samples were analyzed for VOCs, SVOCs, TPHC, and nitrate/nitrite. The analytical results are presented in Table 5-14. Sample 91B14 contained 1,050 µg/l of nitrate/nitrite, sample 91B15 contained 17 µg/l of acetone.

Table 5-14. SWMU #15 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SURFACE SOIL	S15S01	0.5	TPHC	28.3
	S15S02	0.5	TPHC	108
SOIL BORING	91B14	5	TPHC	20.9
	91B15	9	TPHC	12.2
GROUNDWATER	91B14	8	Nitrate/Nitrite	1,050
	91B15	11	Acetone	17



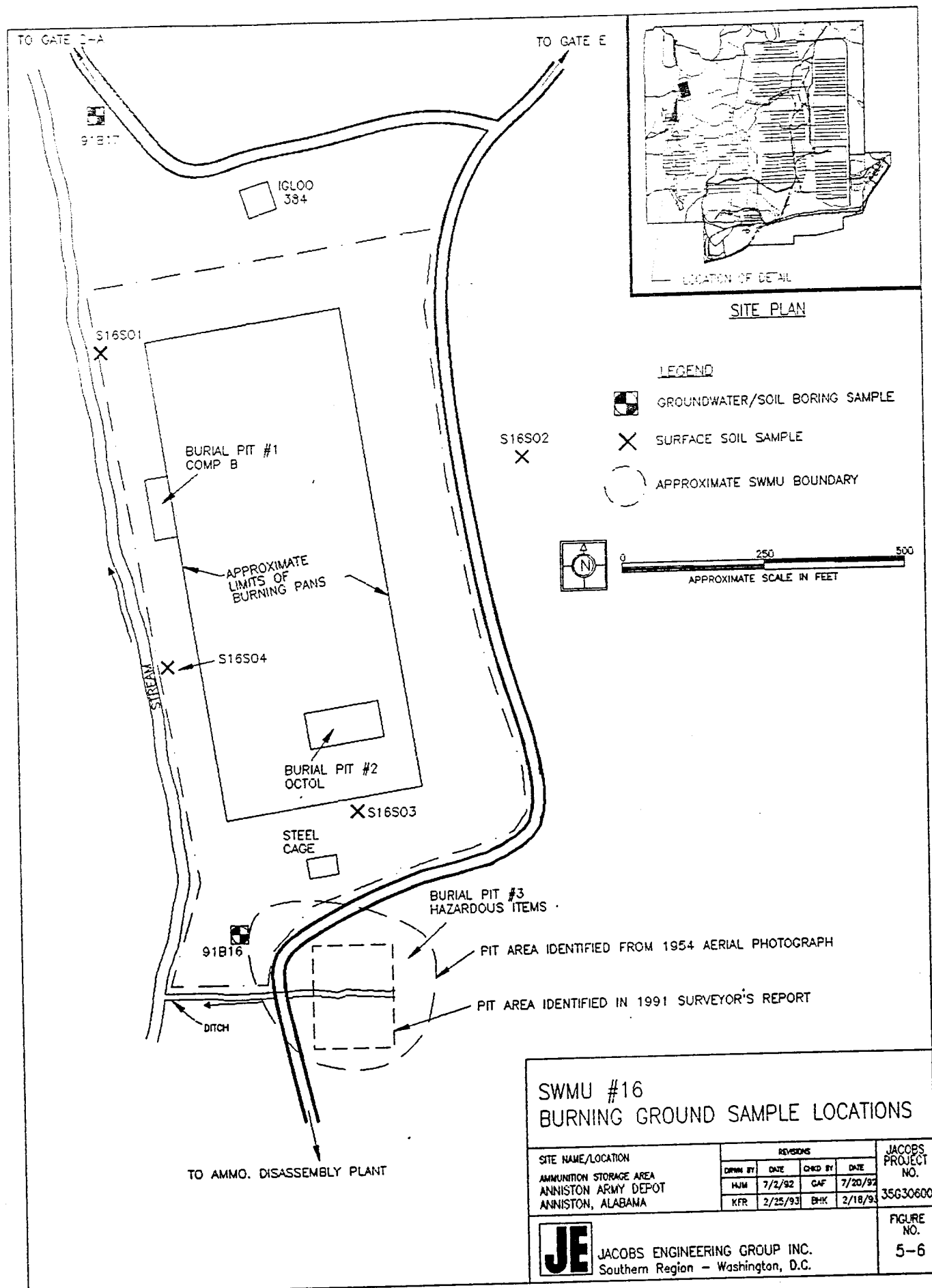
5.3.7 SWMU #16 — Burning Ground

Possible contaminants of concern at SWMU #16 include TNT, octol, explosive D, tetryl, RDX, smokeless powder, Comp B, amatol, various propellants, ignitors, and hydrocarbons. Samples were analyzed for parameters that included inorganics, TPHC, and explosives.

5.3.7.1 Investigative Activities. Geophysical surveys were conducted at proposed SWMU #16 soil boring and monitoring well sites in December 1991; EM methods were used for this purpose. Results of the geophysical surveys were examined for evidence of burial pits or other ground disturbances indicative of buried materials. Typical conductivity values were encountered during the survey with no unusual anomalies identified. Appendix C describes the result of the geophysical survey.

The location of one well site (91B16) was changed when the original site was inaccessible to the drilling rig. The rig was stuck in soft ground while the drillers attempted to set up on the site. At the direction of USATHAMA, the well site was relocated closer to the Burning Ground in an area potentially affected by OB activities (as evidenced by the black ashy material intersected just below the surface). Aerial photographs show that the site of 91B16 is located near the perimeter of a former shallow excavation. The pit was reportedly used for burning of white phosphorus (WP) or other explosive materials (personal communication, ANAD Safety Office). A 1991 surveyor's report identified a smaller area for the former pit. Both pit areas, identified as Burial Pit #3, are shown on Figure 5-6.

Intrusive (subsurface) soil sampling activities were restricted by the ANAD Safety Office to areas outside the Burning Ground. UXO surface sweeps were conducted at each soil boring site to assure the safety of drilling crews. Borehole surveys for UXO were conducted during borehole drilling operations in this SWMU. UXO hazards were not encountered during soil boring operations.



Subsurface soil samples from two soil borings, four surface soil samples, and groundwater samples from two monitoring wells were collected and analyzed. The sample locations for SWMU #16 are identified in Figure 5-6. A summary of chemicals detected above control screening values are presented in Table 5-15.

5.3.7.2 Results of Investigation.

Soil Boring Samples — Two soil borings, identified as 91B16 and 91B17, were drilled at SWMU #16. Black ashy material was intersected from 0.25 to 0.5 feet below the surface in boring 91B16. Five soil samples were collected from boring 91B16, at depths of 0.5 (the black ashy material), 10, 15, 18, and 24 feet below ground surface. Three soil samples were collected from boring 91B17, at depths of 5, 10, and 15 feet below ground surface. Monitoring wells were constructed in these boreholes. The samples collected from both borings were analyzed for inorganics, explosives, and TPHC. The three samples collected from boring 91B17 were selected to be control samples. The analytical results from the five soil boring samples collected at SWMU #16 are tabulated in Table 5-15.

TPHC was detected at 24 feet at 15.8 µg/g. Inorganics were detected above control screening values at all five depths including aluminum, barium, chromium, cobalt, copper, iron, lead, manganese, nickel, potassium, sodium, and zinc.

Surface Soil Samples — Four surface soil samples, identified as S16S01, S16S02, S16S03, and S16S04, were collected and analyzed for inorganics, explosives, and TPHC. The analytical results are tabulated in Table 5-15. The inorganics detected above control screening values were barium, cadmium, cobalt, copper, lead, manganese, nickel and zinc. TPHC was detected in surface soil samples S16S01, S16S02, S16S04 at concentrations of 249, 589, and 658 µg/g, respectively.

Groundwater Samples — Two groundwater samples, identified as 91B16 and 91B17, were collected from monitoring wells that were installed in boreholes 91B16 and 91B17. The samples were analyzed for VOCs, SVOCs, inorganics, explosives, and nitrate/nitrite. The analytical results are presented in Table 5-15.

Cyanide, explosives and TPHC were not detected in either of the samples. Nitrate/nitrite was detected in samples 91B16 and 91B17 at 349 µg/l and 580 µg/l, respectively. The only inorganics that were detected at concentrations greater than the control screening values were chromium in 91B16 and magnesium and sodium in 91B17.

Table 5-15. SWMU #16 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT COMPOUND	CONCENTRATION (µg/g or µg/l)
SURFACE SOIL	S16S01	0.5	TPHC	249
			Barium	925
			Cadmium	2.34
			Copper	82.5
			Lead	203
			Zinc	648
	S16S02	0.5	TPHC	589
			Barium	622
			Cobalt	90.8
			Copper	84.1
			Lead	43.7
			Manganese	7,100
			Nickel	84.4
			Zinc	161
	S16S03	0.5	Zinc	141
	S16S04	0.5	TPHC	658
			Copper	20.9
			Lead	64.1
			Zinc	73.4

Anniston Army Depot, Alabama
Expanded Site Inspection of the Ammunition Storage Area

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT COMPOUND	CONCENTRATION (µg/g or µg/l)
SOIL BORING	91B16	0.5	Barium	148
			Cobalt	43.3
			Copper	45.1
			Iron	53,000
			Lead	136
			Manganese	1,600
			Sodium	278
			Zinc	180
SOIL BORING	91B16	10	Barium	191
			Cobalt	66.8
			Copper	51.4
			Manganese	3,600
			Sodium	182
			Nickel	61
			Zinc	124
		15	Barium	88.2
			Cobalt	33.2
			Copper	29.5
			Manganese	1,500
			Nickel	40.7
		18	Aluminum	16,000
			Potassium	901
			Sodium	159
		24	TPHC	15.8
			Barium	91.6
			Manganese	1,400
			Nickel	36.9

Table 5-15. SWMU #16 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT COMPOUND	CONCENTRATION (µg/g or µg/l)
GROUNDWATER	91B16	25	Chromium	145
			Nitrate/Nitrite	349
	91B17	14	Magnesium	12,000
			Sodium	7,040
			Nitrate/Nitrite	580

5.3.8 SWMU #17 — Demolition Pit

A suite of analytical parameters was selected for SWMU #17 that included inorganics, nitrate/nitrite, VOCs, SVOCs, and explosives based upon the diversity of materials in the demolition pit area.

5.3.8.1 Investigative Activities. Geophysical surveys were conducted at proposed SWMU #17 soil boring and monitoring well sites in December 1991; EM methods were used for this purpose. Results of the geophysical surveys were examined for evidence of burial pits or other ground disturbances indicative of buried materials. Typical conductivity values were encountered during the survey with no unusual anomalies identified. Appendix C describes the results of the geophysical survey performed at this SWMU.

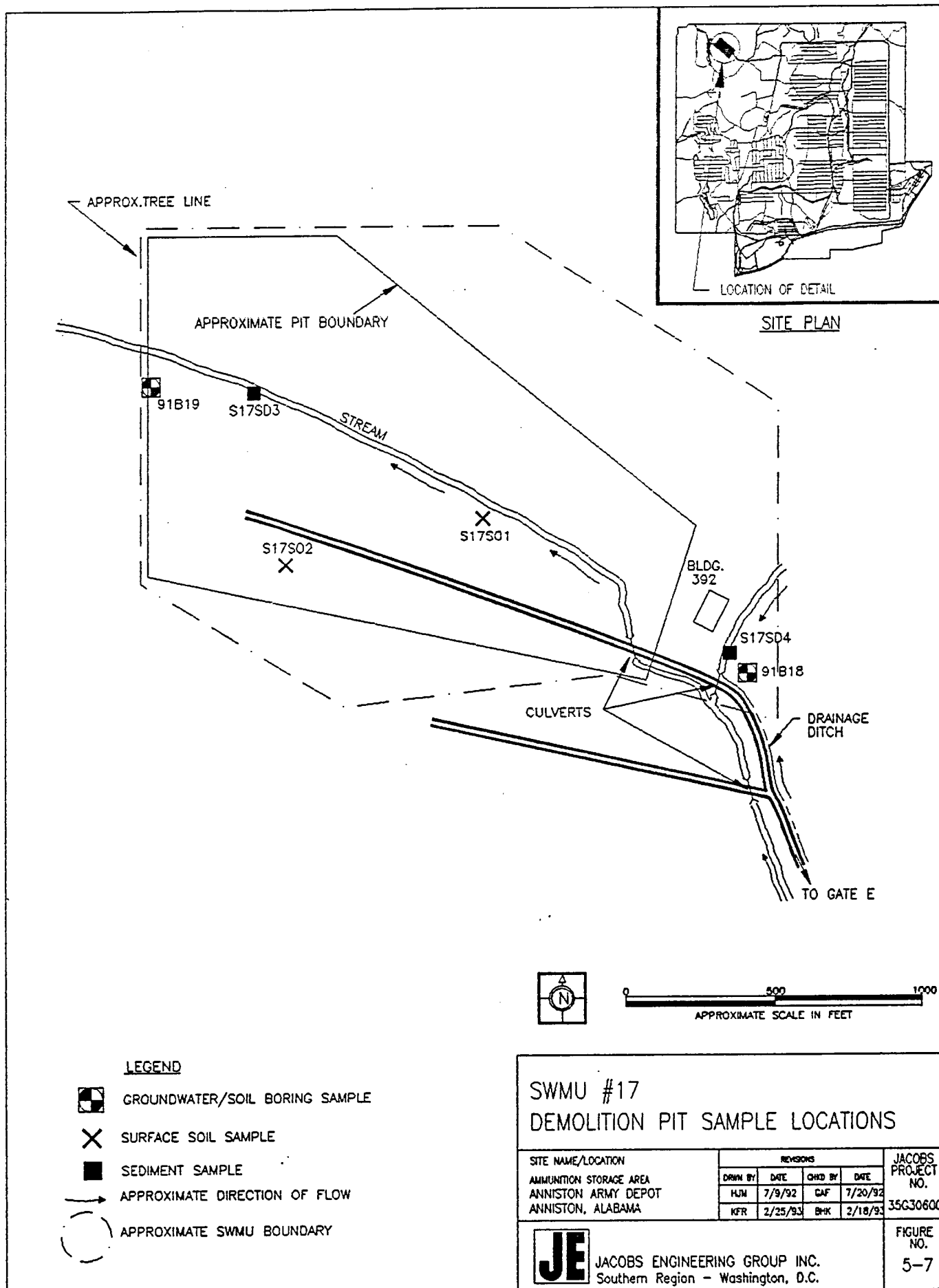
Intrusive (subsurface) soil sampling activities were restricted by the ANAD Safety Office to areas outside the Demolition Pit. Surface sweeps for UXO were conducted at each soil boring site to assure the safety of drilling crews. Borehole surveys for UXO were conducted during borehole drilling operations in this SWMU. UXO hazards were not encountered during soil boring operations.

Subsurface soil samples from two soil borings, two surface soil samples, two surface sediment samples, and groundwater samples from two new monitoring wells were collected and analyzed. The sample locations for SWMU #17 are identified in Figure 5-7 and the data summary of analyte detections above the control screening values are presented in Table 5-16.

5.3.8.2 Results of Investigation.

Soil Boring Samples — Two soil borings, identified as 91B18 and 91B19, were drilled at SWMU #17. Four soil samples were collected: one at a depth of 5 feet below ground surface from boring 91B18 and three at depths of 5, 10, and 12 feet





below ground surface from boring 91B19. The samples were analyzed for inorganics, explosives, and TPHC. As described in Section 5.1, soil samples from boring 91B18 were selected as control screening samples. The analytical results for the three samples from 91B19 are presented in Table 5-16.

Cyanide and explosives were not detected in soil samples collected from boring 91B19. The following inorganics were detected in the 5 foot deep sample collected from boring 91B19 at concentrations greater than control screening values: barium, cadmium, copper, lead, mercury, potassium, sodium, and zinc. Mercury and TPHC were detected in the 10 foot deep sample, and cobalt and manganese were detected in the 12 foot deep sample collected from boring 91B19.

Surface Soil Samples — Two surface soil samples, identified as S17S01 and S17S02, were collected from SWMU #17. The samples were analyzed for inorganics, explosives, and TPHC. The analytical results are presented in Table 5-16. Cyanide was not detected in either of the samples. The following inorganics were detected at concentrations greater than control screening values: beryllium, cadmium, copper, iron, lead, nickel, silver, vanadium, and zinc. TPHC was detected in sample S17S01 and S17S02 at concentrations of 55.6 µg/g and 22.4 µg/g, respectively. Two explosives were detected in sample S17S02: nitroglycerin at 17.6 µg/g and 2,4-dinitrotoluene at 0.448 µg/g.

Sediment Samples — Two sediment samples, identified as S17SD3 and S17SD4, were collected at depths of 6 inches below the surface water/sediment interface. The samples were analyzed for inorganics, explosives, and TPHC. The analytical results are presented in Table 5-16. Cyanide and explosives were not detected in either sample. TPHC was detected in samples S17SD3 and S17SD4 at concentrations of 36.3 µg/g and 110 µg/g, respectively. Two inorganics, cadmium and copper, were detected in sample S17SD3 at concentrations greater than control screening values.

Groundwater Samples — Two groundwater samples were collected from the monitoring wells installed in boreholes 91B18 and 91B19. The samples were analyzed for inorganics, explosives, nitrate/nitrite and VOCs. As discussed in Section 5.1, groundwater samples from well 91B18 were selected as control samples. The analytical results are presented in Table 5-16. Cyanide and nitrate/nitrite were not detected. The following inorganics were detected at concentrations greater than control screening values: beryllium, cadmium, cobalt, lead, manganese, nickel, thallium, and zinc. The explosive 4-nitrotoluene and the VOC acetone were also detected.



Table 5-16. SWMU #17 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SEDIMENT	S17SD3	0.5	TPHC	36.3
			Cadmium	0.899
			Copper	97.6
	S17SD4	0.5	TPHC	110
SURFACE SOIL	S17S01	0.5	TPHC	55.6
			Beryllium	2.42
			Copper	30
			Iron	50,000
			Lead	41
			Nickel	24.6
			Vanadium	72.6
			Zinc	212
	S17S02	0.5	TPHC	22.4
			Cadmium	7.36
			Copper	438
			Silver	2.92
			Zinc	220
			2,4-Dinitrotoluene	0.448
			Nitroglycerine	17.6
SOIL BORING	91B19	5	Barium	547
			Cadmium	6.51
			Copper	146
			Lead	61.8
			Mercury	0.521
			Potassium	740
			Sodium	141
			Zinc	336

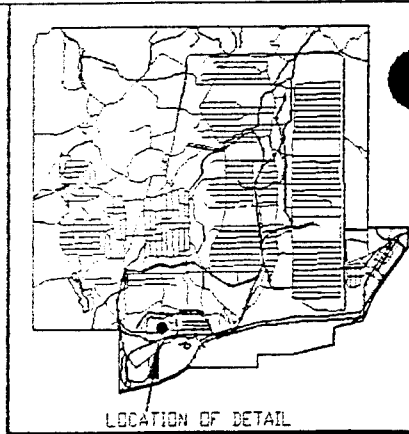
Table 5-16. SWMU #17 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SOIL BORING	91B19	10	TPHC	25.8
			Mercury	0.44
		12	Cobalt	43.6
			Manganese	2,200
GROUNDWATER	91B19	17	Beryllium	3.22
			Cadmium	18.4
			Cobalt	131
			Lead	100
			Manganese	18,000
			Nickel	180
			Thallium	2.64
			Zinc	1,240
			Acetone	13
			4-Nitrotoluene	2.25

5.3.9 SWMU #18 — Old Sewage Treatment Plant (STP)

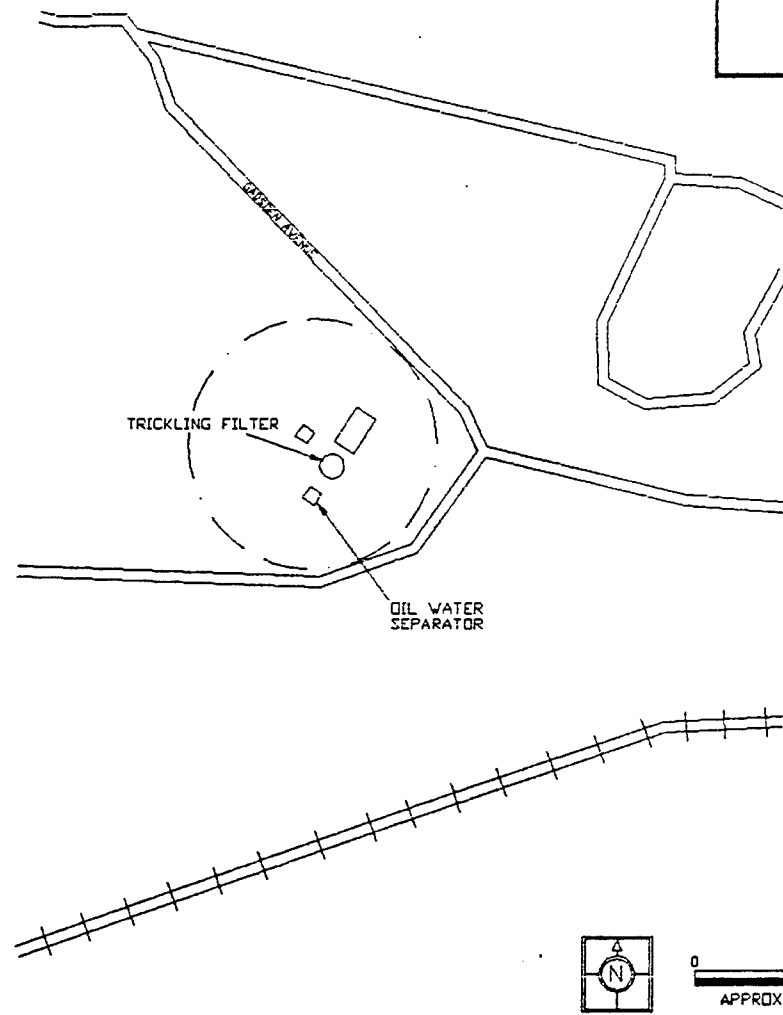
SWMU #18 is no longer active as a sewage treatment plant, but is now used as a fire training area. A recent records search included a review of all available records pertinent to this SWMU. These records were stored in filing cabinets located in the environmental engineering offices at ANAD. No records are available that would indicate whether groundwater or soils were impacted by past sewage treatment operations. A recent visit to the site found evidence that fire training activities had recently been conducted: vegetation was charred, and the odor of petroleum was present at ground surface.

No field sampling was conducted at SWMU #18. A map of this SWMU is presented as Figure 5-8.

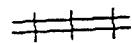


LOCATION OF DETAIL

SITE PLAN



APPROXIMATE SWMU BOUNDARY



RAILROAD TRACKS

NOTE: NO SAMPLES WERE COLLECTED AT THIS SWMU;
ONLY A DOCUMENTS REVIEW WAS PERFORMED.

FIGURE DESCRIPTION

SWMU18

SWMU #18
OLD SEWAGE TREATMENT PLANT

SITE NAME/LOCATION
AMMUNITION STORAGE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS			
DRWN BY	DATE	CHKD BY	DATE
KFR	3/3/93	BHK	2/23/93

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NO.
35G308



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FIGURE
NO.
5-8

5.3.10 SWMU #26 & #27—North and South TNT Burial Pits

SWMUs #26 and #27 were reported as burn sites for wastes which may have included TNT-contaminated wastes (ESE, 1989). Samples collected at these SWMUs were analyzed for selected parameters that included inorganics and explosives.

5.3.10.1 Investigative Activities. SWMUs #26 and #27 were inspected in December 1991 by a Jacobs geologist and UXO specialists from UXB International prior to starting sampling activities. The inspection concluded there was no need for UXO surface sweep of either area. UXO clearance of sampling sites was not performed.

Geophysical surveys were performed by technicians from Technos, Inc. in December 1991. EM surveys were used to identify the boundaries of the pits for selecting intrusive environmental sampling sites. A determination of the lateral extent of the pits in these SWMUs was accomplished using these techniques. GPR was used at SWMU #26 to verify results of the EM survey. Appendix C describes results of the geophysical surveys performed.

Both sites were inspected in January 1991 by a representative of the USATHAMA Safety Office to determine whether chemical field screening of soils for explosives was necessary. Due to the nature of the wastes and reports that the wastes were burned prior to burial, it was determined that no chemical field screening was necessary. Intrusive (subsurface) soil sampling activities were restricted by the ANAD Safety Office to areas outside the TNT Burial Pit boundaries; surface soil sampling down to six inches was unrestricted.

Subsurface soil samples from four soil borings, four surface soil samples, one sediment sample, and groundwater samples from four monitoring wells were collected and analyzed. Sample locations for SWMUs #26 and #27 are identified in Figure 5-9 and the data summary of detections above control screening values are presented in Table 5-17 (SWMU #26) and Table 5-18 (SWMU #27).

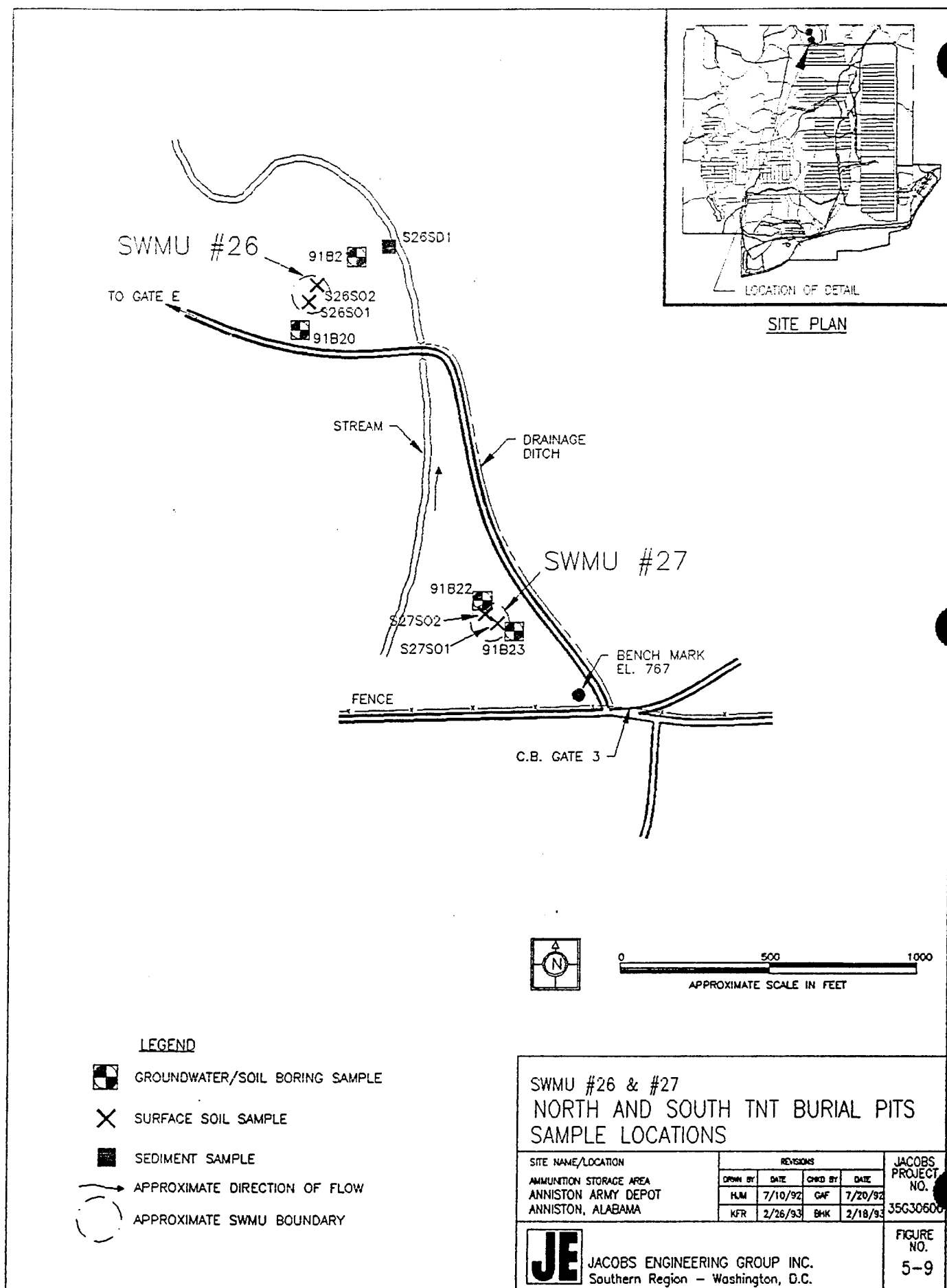


Table 5-17. SWMU #26 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g)
SURFACE SOIL	S26S01	0.5	Iron	40,000
			Manganese	1,700
			Lead	43.6
SEDIMENT	S26SD1	0.5	Calcium	795
			Lead	45.1
			Magnesium	1,190
SOIL BORING	91B20	20	Aluminum	18,000
			Cobalt	37.7
			Mercury	0.228
			Potassium	789
			Sodium	144
			Methylene chloride	0.03
	91B21	10	Aluminum	15,000
			Barium	52.3
			Cobalt	19.6
			Magnesium	1,020
			Manganese	460
			Sodium	130
		33	Acetone	0.045
			Aluminum	27,000
			Beryllium	2.89
			Calcium	1,730
			Copper	35
			Magnesium	1,990
			Manganese	1,500
			Potassium	928



Table 5-17. SWMU #26 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/l)
GROUNDWATER	91B20	13	Chromium	110
			Silver	105
			Nitrate/Nitrite	375
	91B21	10	Calcium	63,000
			Magnesium	33,000
			Zinc	1,090
			Nitrate/Nitrite	317

Table 5-18. SWMU #27 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SURFACE SOIL	S27S01	0.5	Lead	47.4
SOIL BORING	91B22	17	Acetone	0.064
			Sodium	85.4
	91B23	37.5	Beryllium	3.5
			Calcium	1,450
			Cobalt	37.3
			Copper	44.4
			Iron	47,000
			Lead	51.6
			Magnesium	1,560
			Mercury	0.215
			Nickel	41.3
		100	Potassium	734
			Vanadium	76.5
			Trichloroethylene	0.011
	91B22	8	Magnesium	8,020
			Nitrate/Nitrite	68.3
			Bis(2-ethylhexyl) phthalate	41
GROUNDWATER	91B23	6	Nitrate/Nitrite	200
			Calcium	50,000
			Magnesium	26,700

5.3.10.2 Results of Investigation.

Soil Boring Samples — Two soil borings, identified as 91B20 and 91B21, were drilled at SWMU #26, and two soil borings, identified as 91B22 and 91B23, were drilled at SWMU #27. Soil samples were collected at 20 feet below ground surface from boring 91B20; 10 feet and 33 feet below ground surface from boring 91B21; 17 feet below ground surface from boring 91B22; and 37.5 and 100 feet below ground surface from boring 91B23. The samples were analyzed for inorganics, explosives, and VOCs. The analytical results are presented in Tables 5-17 and 5-18.

Cyanide and explosives were not detected in any of the soil boring samples. Several inorganics were detected at concentrations greater than the control screening values in samples collected from boreholes 91B20, 91B21, 91B22, and 91B23 including aluminum, barium, beryllium, calcium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, and vanadium. Methylene chloride was detected in a sample collected from borehole 91B20 at a concentration of 0.03 µg/g. Acetone was detected in the 10 foot deep sample collected from borehole 91B21 and the 17 foot deep sample collected from borehole 91B22 at concentrations of 0.045 µg/g and 0.064 µg/g. Trichloroethylene was detected in the 37.5 feet deep sample collected from borehole 91B23 at 0.011 µg/g.

Surface Soil Samples — Four surface soil samples, identified as S26S01, S26S02, S27S01, and S27S02, were collected from SWMU #26 and SWMU #27. The samples were analyzed for inorganics and explosives. Samples S26S02 and S27S02 were selected to be control samples. The analytical results above control screening values for the remaining samples are presented in Tables 5-17 and Table 5-18. Explosives were not detected in any of the samples. The inorganics, iron, manganese, and lead were detected at concentrations greater than control screening values.

Sediment Samples — One sediment sample, identified as S26SD1, was collected at SWMU #26 from a depth of 6 inches below the surface water/sediment interface. This sample was analyzed for inorganics and explosives. The analytical results for this sample are presented in Table 5-17. Cyanide and explosives were not detected in the sediment sample. The following inorganics were detected in the sample at concentrations greater than the control screening values: calcium, magnesium and lead.

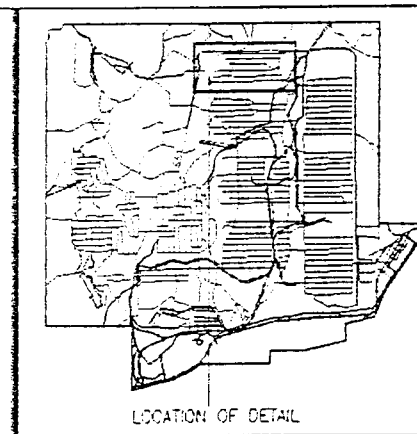
Groundwater Samples — Four groundwater samples were collected from the monitoring wells that were constructed in boreholes 91B20 (upgradient), 91B21 (downgradient), 91B22 (downgradient), and 91B23 (upgradient). The samples were analyzed for inorganics, explosives, nitrate/nitrite, and VOCs. The analytical results are presented in Table 5-17 and 5-18. Cyanide and explosives were not detected in any of the samples. Inorganics were detected in all of the samples at concentrations greater than control screening values including calcium, chromium, magnesium, silver, and zinc. Nitrate/nitrite was detected in sample 91B20, 91B21, 91B22, and 91B23 at concentrations of 375 µg/l, 317 µg/l, 68.3 µg/l, and 200 µg/l, respectively. The SVOC bis(2-ethylhexyl) phthalate was detected in sample 91B22 at a concentration of 41 µg/l.

This concentration of bis(2-ethylhexyl) phthalate was compared to the QA/QC blanks to determine whether or not this represented laboratory contamination or a positive detection. Because no bis(2-ethylhexyl) phthalate was detected in the QA/QC blank, the sample result is considered a positive detection.

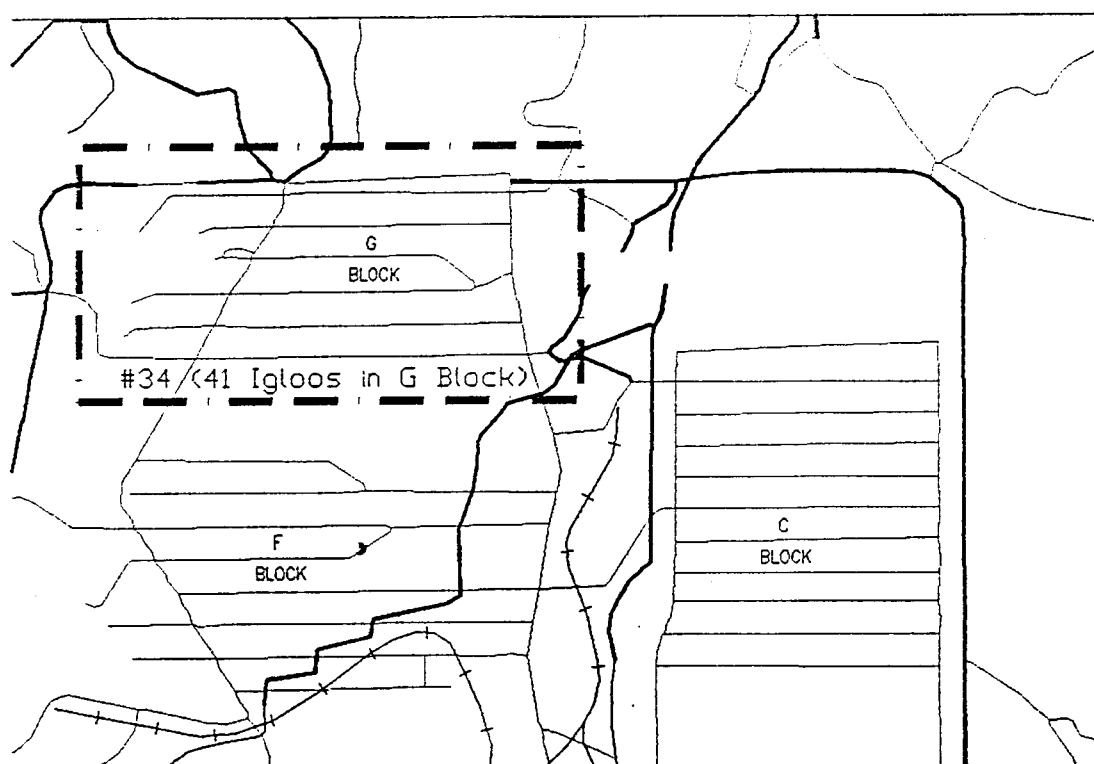
5.3.11 SWMU #34 — Chemical Storage Igloos

SWMU #34 includes 41 chemical storage igloos. No documentation that indicates that groundwater or soils are impacted by release of contaminants from the contents of these igloos was found during the records search. ANAD-RMD personnel informed Jacobs that air monitoring of the igloo interiors is performed on a weekly basis. Any leaks detected within the igloos are immediately investigated and the source of the leak remediated (i.e., leaking M55 rockets are overpacked).

No field investigation was conducted at SWMU #34. A map of this SWMU is presented as Figure 5-10.



SITE PLAN



0 2500 5000
APPROXIMATE SCALE IN FEET



APPROXIMATE SWMU BOUNDARY



RAILROAD TRACKS

NOTE: NO SAMPLES WERE COLLECTED AT THIS SWMU;
ONLY A DOCUMENTS REVIEW WAS PERFORMED.

SWMU #34
CHEMICAL STORAGE IGLOOS AREA

SITE NAME/LOCATION

AMMUNITION STORAGE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS

DRAWN BY	DATE	CHKD BY	DATE
KFR	2/26/93	BRK	2/18/93

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NO.

35G30600



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FIGURE
NO.

5-10

5.3.12 SWMU #35 — Deactivation Furnace (Building 393)

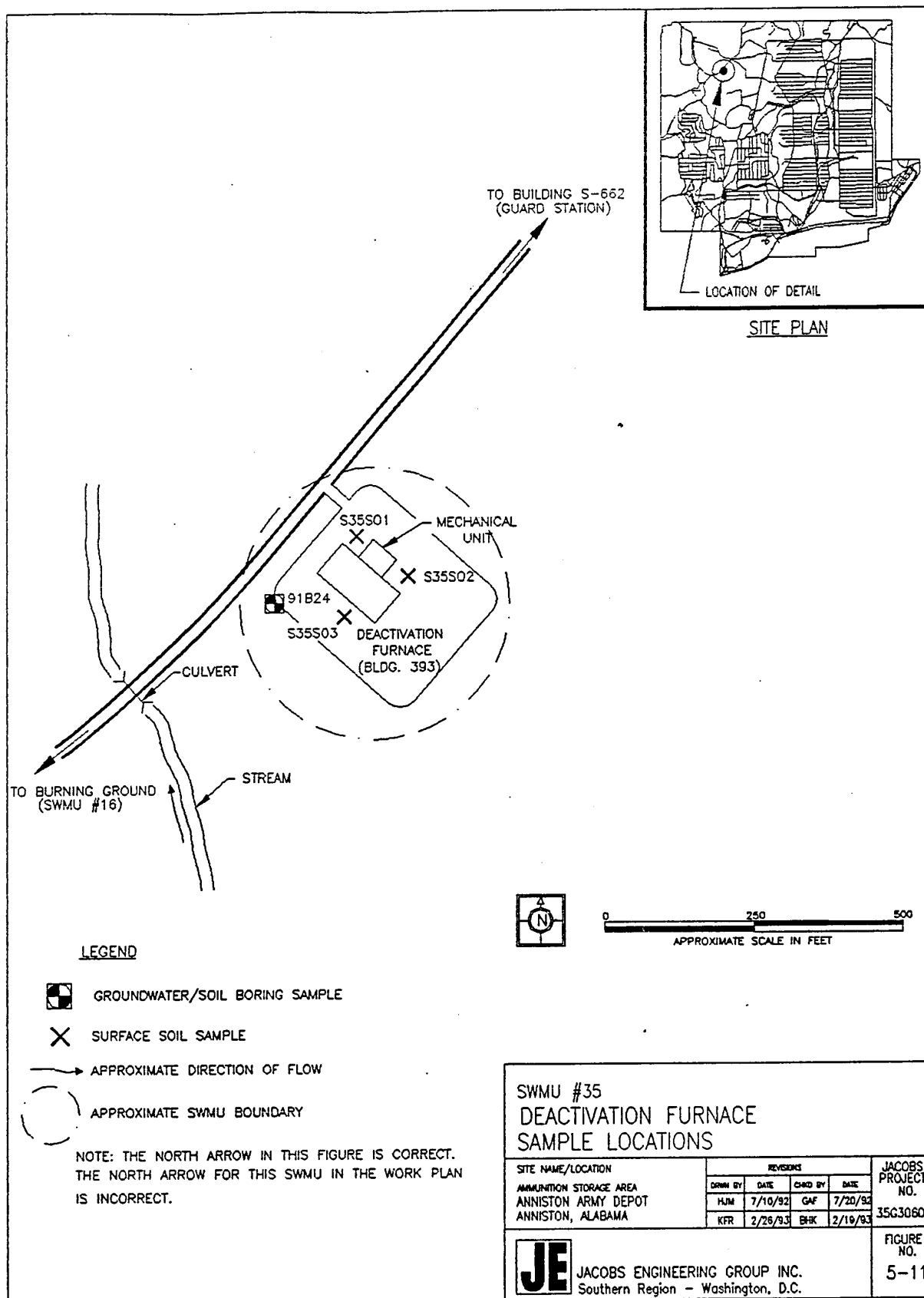
Potential contaminants of concern at SWMU #35 include lead, cadmium, copper, zinc, and TPHC. Samples collected at this SWMU were analyzed for selected parameters that include inorganics and TPHC.

5.3.12.1 Investigative Activities. Proposed sampling sites at SWMU #35 were inspected in November 1991 by representatives from Jacobs and the ANAD Safety Office prior to initiating the intrusive sampling program. Proposed surface soil sampling sites were cleared with ANAD Safety Office representative. At the request of the ANAD Safety Office, the site of a proposed soil boring/monitoring well installation was moved from its proposed location in the parking area near the former UST site to a location at the edge of the gravel parking lot away from the building (the proposed location would have created a traffic hazard).

Subsurface soil samples from one soil boring, three surface soil samples, and a groundwater sample from one monitoring well were collected and submitted to the laboratory. The sample locations for SWMU #35 are identified in Figure 5-11. A summary of contaminants detected above control screening values is presented in Table 5-19.

5.3.12.2 Results of Investigation.

Soil Boring Samples — One soil boring, identified as 91B24, was drilled at SWMU #35. Four soil samples were collected from the boring at depths of 10, 20, 30, and 40 feet below ground surface. The samples were analyzed for TPHC. The analytical results are presented in Table 5-19. TPHC was detected in the 20 and 40 feet deep samples collected from borehole 91B24 at concentrations of 62.8 µg/g and 20.4 µg/g, respectively.



Surface Soil Samples — Three surface soil samples, identified as S35S01, S35S02, and S35S03, were collected at SWMU #35. The samples were analyzed for inorganics, explosives, and TPHC. The analytical results are presented in Table 5-19. Inorganics were detected in all three surface soil samples at concentrations greater than control screening values including barium, cadmium, calcium, cobalt, copper, lead, magnesium, manganese, nickel, silver, and zinc. TPHC was detected in S35S01, S35S02, and S35S03 at 133 µg/g, 61.4 µg/g, and 73.5 µg/g, respectively.

Groundwater Samples — One groundwater sample was collected from the monitoring well constructed in borehole 91B24 (downgradient). The sample was analyzed for inorganics, explosives, TPHC, and VOCs. The analytical results are presented in Table 5-19. Cyanide, explosives, VOCs and TPHC were not detected in the sample. The following inorganics were detected in the sample at concentrations greater than the control screening values: sodium and lead.

Table 5-19. SWMU #35 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SURFACE SOIL	S35S01	0.5	TPHC	133
			Barium	954
			Cadmium	20.4
			Calcium	100,000
			Copper	422
			Lead	9,100
			Magnesium	59,000
			Silver	2.65
			Zinc	607
	S35S02	0.5	TPHC	61.4
			Barium	184
			Cadmium	2.62
			Calcium	15,000
			Cobalt	40.7
			Copper	102
			Lead	1,200
			Magnesium	8,000
			Manganese	4,200
			Nickel	52.9
			Zinc	937
	S35S03	0.5	TPHC	73.5
			Barium	196
			Cadmium	7.18
			Calcium	4,160
			Copper	310

Table 5-19. SWMU #35 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g or µg/l)
SURFACE SOIL	S35S03	0.5	Lead	1,700
			Magnesium	2,120
			Zinc	969
SOIL BORING	91B24	20	TPHC	62.8
		40	TPHC	20.4
GROUNDWATER	91B24	47	Sodium	7,640
			Lead	24.7

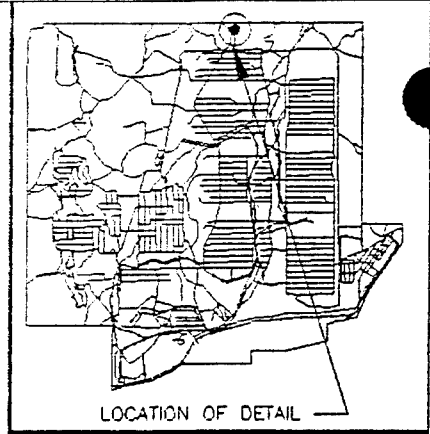
5.3.13 SWMU #36 – DRILL AND TRANSFER SITE

Activities at SWMU #36 were limited to quality assurance testing of GB nerve agents and transferring chemical agents from leaking munitions into one ton containers. Record searches at the ANAD Environmental Engineering offices reveal no indication of agent releases at this site. No evidence of ongoing agent-handling activity or areas of suspected soil contamination was noted during walk through inspections of the site in fall 1991.

No field sampling was conducted at SWMU #36. A map of this SWMU is presented as Figure 5-12.

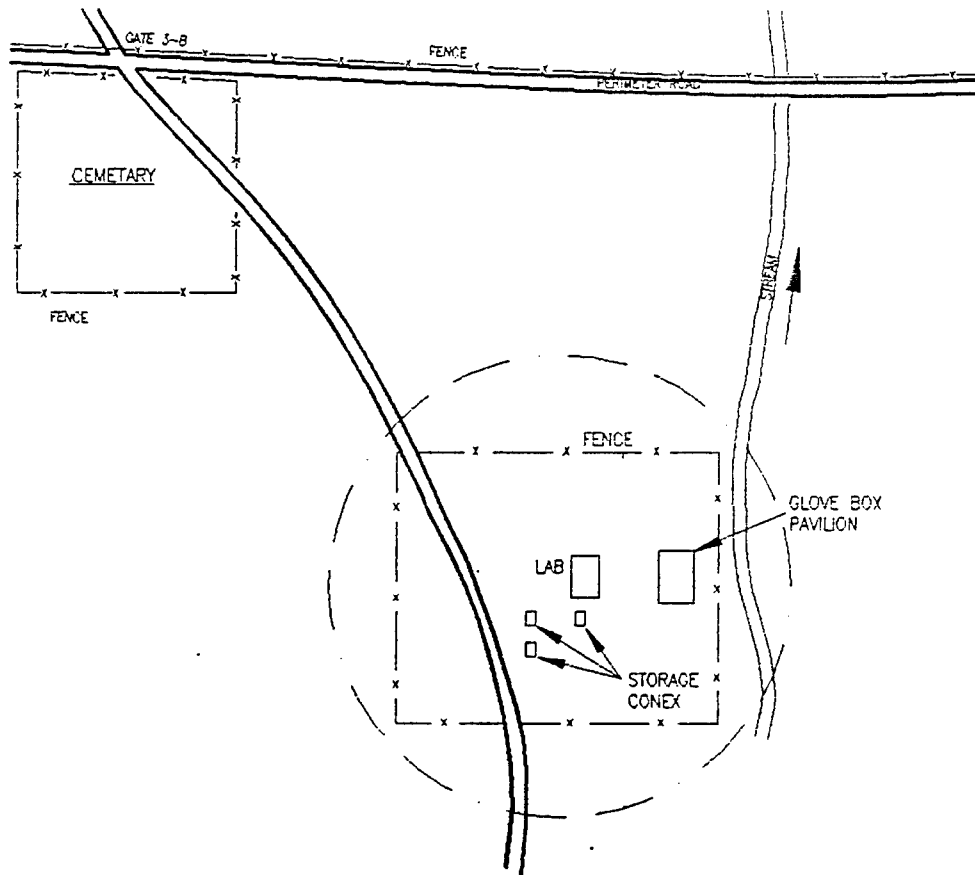


FORT McCLELLAN
MILITARY RESERVATION



LOCATION OF DETAIL

SITE PLAN



0 250 500

APPROXIMATE SCALE IN FEET

APPROXIMATE SWMU BOUNDARY

NOTE: NO SAMPLES WERE COLLECTED AT THIS SWMU;
ONLY A DOCUMENTS REVIEW WAS PERFORMED.

SWMU #36
DRILL AND TRANSFER SITE

SITE NAME/LOCATION
AMMUNITION STORAGE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS			
DRWN BY	DATE	CHKD BY	DATE
KFR	2/26/93	BHK	2/17/93
KFR	6/3/93	BHK	6/3/93

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FIGURE
NO.
5-12

5.3.14 SWMU #37 – VEHICLE WASH RACK

Contaminants of concern at SWMU #37 include oils, grease, industrial cleaning chemicals, and inorganics. Based on these findings, a suite of parameters that included inorganics, VOCs, and SVOCs was selected for chemical analysis.

5.3.14.1 Investigative Activities. Six surface soil samples were collected and submitted to the laboratory. Sample locations for SWMU #37 are identified in Figure 5–13. A summary of contaminants detected above control screening values is presented in Table 5–20.

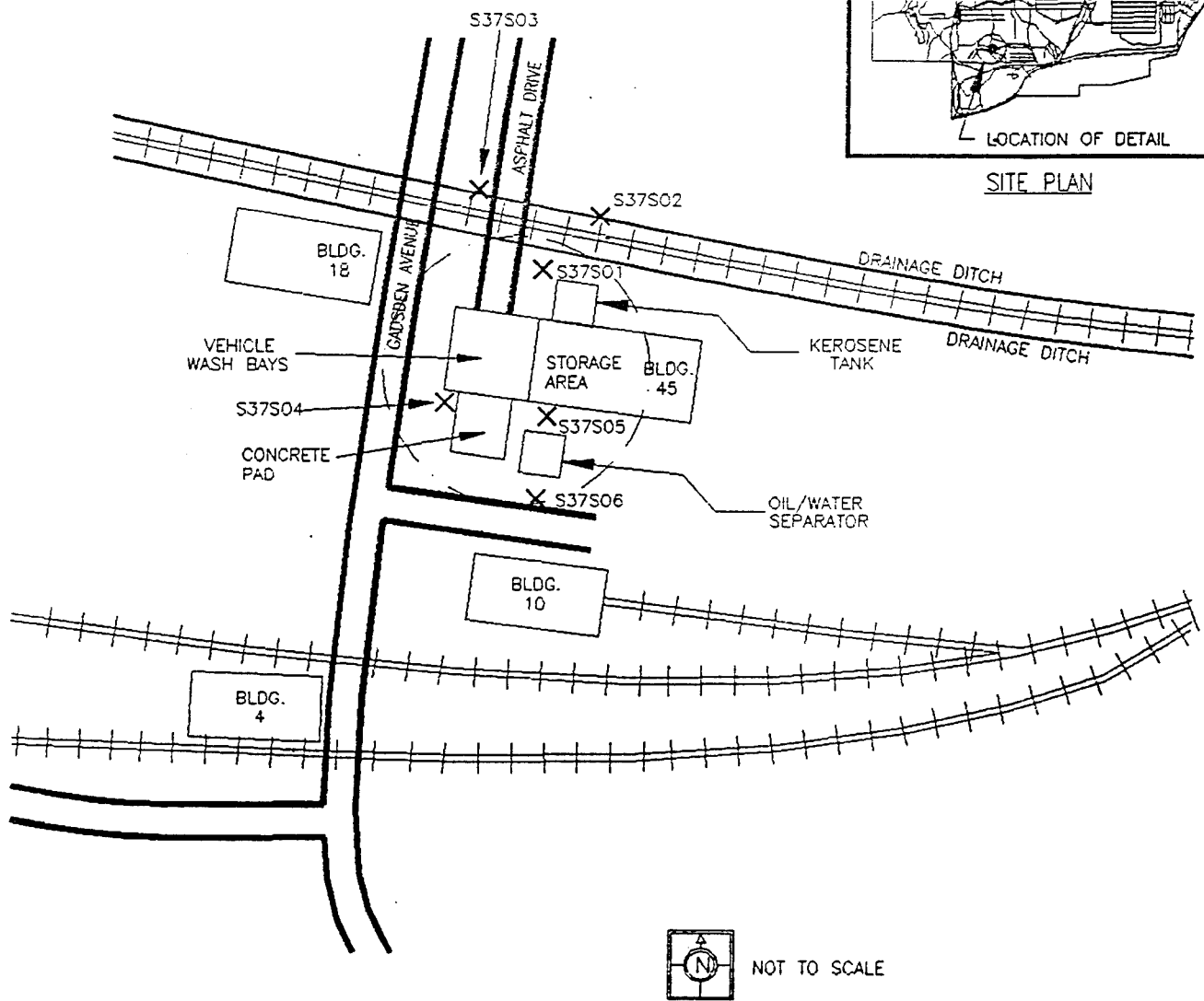
The site was revisited in April 1993 to confirm locations of soil sampling sites and observe site conditions. Soil samples were collected from areas where construction activities have severely altered natural soil horizons. Most of the area around SWMU #37 is covered with gravel, railroad track ballast, and asphalt.

Groundwater samples were not collected from SWMU #37 because no monitoring wells are located in the vicinity.

5.3.14.2 Results of Investigation.

Surface Soil Samples — Six surface soil samples, identified as S37S01, S37S02, S37S03, S37S04, S37S05, and S37S06 were collected from SWMU #37. Samples S37S01, S37S02, and S37S03 were collected within drainage channels on each side of the railroad tracks. These channels do not appear to receive wash rack operations runoff. Samples S37S01, S37S03, and S37S05 were analyzed for inorganics, VOC, and SVOCs. Samples S37S02, S37S04, and S37S06 were analyzed for inorganics only. The analytical results are presented in Table 5–20.





LEGEND

- SURFACE SOIL SAMPLE
- APPROXIMATE SWMU BOUNDARY
- RAILROAD TRACKS

**SWMU #37
VEHICLE WASH RACK
SAMPLE LOCATIONS**

SITE NAME/LOCATION		REVISIONS				JACOBS PROJECT NO. 35G30600
AMMUNITION STORAGE AREA	ANNISTON ARMY DEPOT	DRWN BY	DATE	CHKD BY	DATE	
ANNISTON, ALABAMA		HJM	7/10/92	SAF	7/20/92	
		KFR	2/26/93	BHK	2/19/93	

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FIGURE
NO.
5-13

Cyanide was not detected in any of the samples. Several inorganics were detected in all the samples at concentrations greater than control screening values. Several organic compounds were detected. Sample S37S01 contained 0.37 µg/g of bis(2-ethylhexyl) phthalate, 0.31 µg/g of benzo(a)pyrene, 0.0098 µg/g of methylene chloride, 0.0043 µg/g of toluene, and 0.0033 µg/g of trichloroethylene. Sample S37S03 contained 0.23 µg/g of anthracene, 1.1 µg/g of benzo(a)anthracene, 1.4 µg/g of benzo(a)pyrene, 1.8 µg/g of benzo(b)fluoranthene, 0.98 µg/g of benzo(g,h,i)perylene, 1 µg/g of benzo(k)fluoranthene, 0.88 µg/g of chrysene, 2.4 µg/g of fluoranthene, 1.2 µg/g of indeno(1,2,3-c,d)pyrene, 0.83 µg/g of phenanthrene, 1.4 µg/g of pyrene, and 0.0075 µg/g of trichlorofluoromethane. Contamination detected in samples S37S01, S37S02, and S37S03 appears to be related to the railroad tracks only rather than the wash rack operation and consequently are not discussed in the remaining sections of this report.



Table 5-20. SWMU #37 — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g)
SURFACE SOIL	S37S01	0.5	<i>Barium</i>	179
			<i>Beryllium</i>	1.05
			<i>Cadmium</i>	22.1
			<i>Calcium</i>	19,000
			<i>Chromium</i>	114
			<i>Copper</i>	453
			<i>Iron</i>	46,000
			<i>Lead</i>	900
			<i>Magnesium</i>	8,400
			<i>Molybdenum</i>	16.5
			<i>Nickel</i>	76.5
			<i>Potassium</i>	1,710
			<i>Zinc</i>	594
			<i>Bis(2-ethylhexyl) phthalate</i>	0.37
			<i>Benzo[a]pyrene</i>	0.31
			<i>Methylene chloride</i>	0.0098
			<i>Toluene</i>	0.0043
			<i>Trichloroethylene</i>	0.0033
	S37S02	0.5	<i>Barium</i>	926
			<i>Beryllium</i>	2.06
			<i>Cadmium</i>	3.52
			<i>Calcium</i>	47,000
			<i>Chromium</i>	41.8
			<i>Copper</i>	53
			<i>Lead</i>	423
			<i>Magnesium</i>	13,000

Table 5-20. SWMU #37 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g)
SURFACE SOIL	S37S02	0.5	Manganese	5,800
			Potassium	1,850
			Sodium	177
			Zinc	319
	S37S03	0.5	Calcium	3,160
			Copper	36
			Magnesium	1,550
			Lead	81.4
			Zinc	159
			Anthracene	0.23
			Benzo[a]anthracene	1.1
			Benzo[a]pyrene	1.4
			Benzo[b]fluoranthene	1.8
			Benzo[g,h,i]perylene	0.98
			Benzo[k]fluoranthene	1
			Chrysene	0.88
			Fluoranthene	2.4
			Indeno[1,2,3-c,d]pyrene	1.2
			Phenanthrene	0.83
			Pyrene	1.4
			Trichlorofluoromethane	0.0075
	S37S04	0.5	Calcium	4,070
			Magnesium	2,250
			Zinc	302

Table 5-20. SWMU #37 — Data Summary (Continued)

MATRIX	SAMPLE I.D.	DEPTH (ft)	ELEMENT/ COMPOUND	CONCENTRATION (µg/g)
SURFACE SOIL	S37S05	0.5	Calcium	20,000
			Copper	36
			Lead	58.4
			Magnesium	8,700
			Zinc	134
	S37S06	0.5	Cadmium	6.06
			Calcium	26,000
			Copper	63.4
			Lead	127
			Magnesium	8,600
			Zinc	191

5.3.15 ANAD Northern Boundary Contamination Screening

Consideration was given to the potential for off-site migration of contaminants from the ASA. Surface water runoff from the investigated ASA SWMUs is carried in four stream channels which cross the northern boundary of ANAD. After evaluation of contaminant mobility in surface streams, explosives and nitrate/nitrite were selected as analytical parameters for Northern Boundary area sampling efforts. The analytical results are presented in Table 5-21.

5.3.15.1 Investigative Activities. Four sampling sites were proposed for the North Boundary contamination assessment. One site was eliminated from the sampling program due to a lack of water in the stream at the time of sampling. Locations of the three remaining sampling sites are shown on Figures 5-14 through 5-16.

5.3.15.2 Results of Investigation.

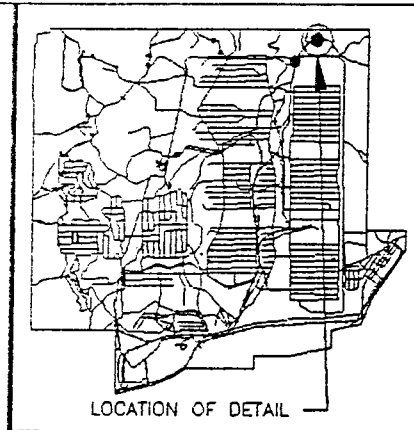
Sediment Samples — Three sediment samples, identified as NBSD1, NBSD2, and NBSD3, were collected from the northern boundary at 6 inches below the surface water/sediment interface. The samples were analyzed for nitrate/nitrite and explosives. No contaminants were detected in any of the sediment samples.

Surface Water Samples — Three surface water samples, identified as NBSW1, NBSW2, and NBSW3, were collected from water courses flowing out from the northern boundary of the ANAD. The samples were analyzed for nitrate/nitrite and explosives. The analytical results are presented in Table 5-21.

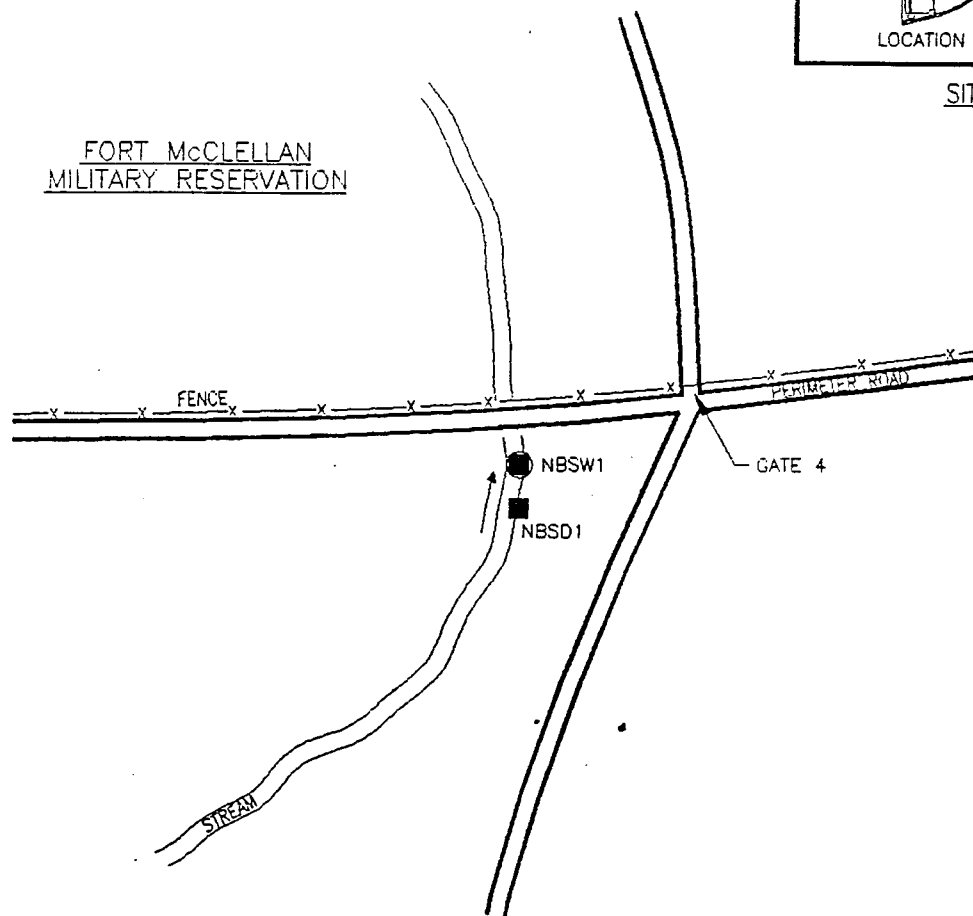
Nitrate/nitrite was detected in samples NBSW1 and NBSW3 at 92.6 µg/l and 86.6 µg/l respectively. Nitrate/nitrite was not detected in NBSW2. Explosives were not detected in any of the samples.

Table 5-21. Northern Boundary Area Samples — Data Summary

MATRIX	SAMPLE I.D.	DEPTH (ft)	ANALYTE	CONCENTRATIONS (µg/l)
SURFACE WATER	NBSW1	0	Nitrate/Nitrite	92.6
	NBSW3	0	Nitrate/Nitrite	86.6



SITE PLAN



0 250 500
APPROXIMATE SCALE IN FEET

LEGEND



SEDIMENT SAMPLE



SURFACE WATER SAMPLE



APPROXIMATE DIRECTION OF FLOW

NORTHERN BOUNDARY
SITE NO.1 SAMPLE LOCATIONS

SITE NAME/LOCATION

AMMUNITION STORAGE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS

DRAWN BY	DATE	CHD BY	DATE
HJM	7/15/92	CAF	7/20/92
KFR	2/26/93	BHK	2/19/93

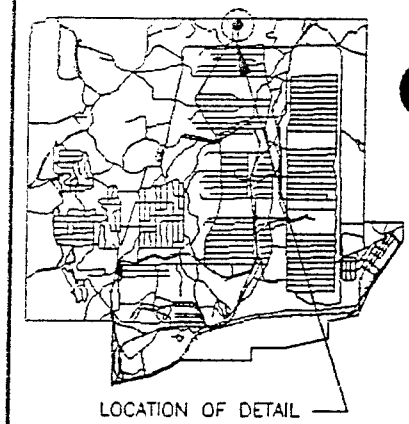
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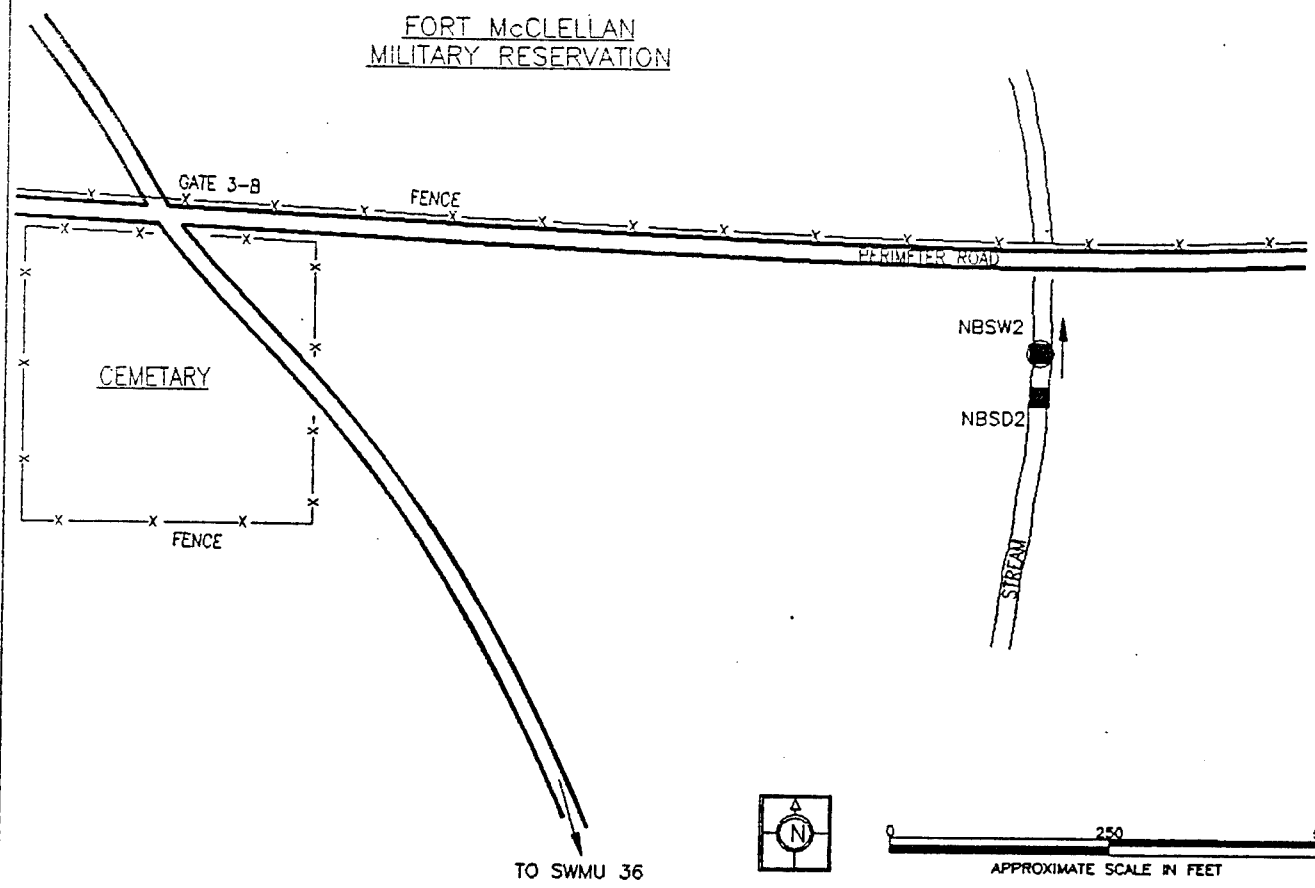
FIGURE
NO.
5-14



LOCATION OF DETAIL

SITE PLAN

FORT McCLELLAN
MILITARY RESERVATION



0 250 500
APPROXIMATE SCALE IN FEET

LEGEND

- SEDIMENT SAMPLE
- SURFACE WATER SAMPLE
- APPROXIMATE DIRECTION OF FLOW

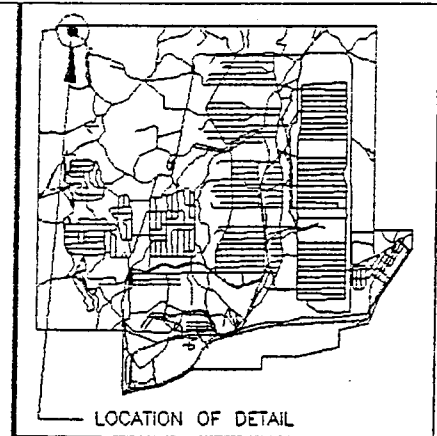
NORTHERN BOUNDARY
SITE NO.2 SAMPLE LOCATIONS

SITE NAME/LOCATION		REVISIONS				JACOBS PROJECT NO. 35G3060
AMMUNITION STORAGE AREA ANNISTON ARMY DEPOT ANNISTON, ALABAMA		DRWN BY	DATE	CHD BY	DATE	
		HJM	7/2/92	GAF	7/20/92	
		KFR	2/28/93	BHK	2/19/93	

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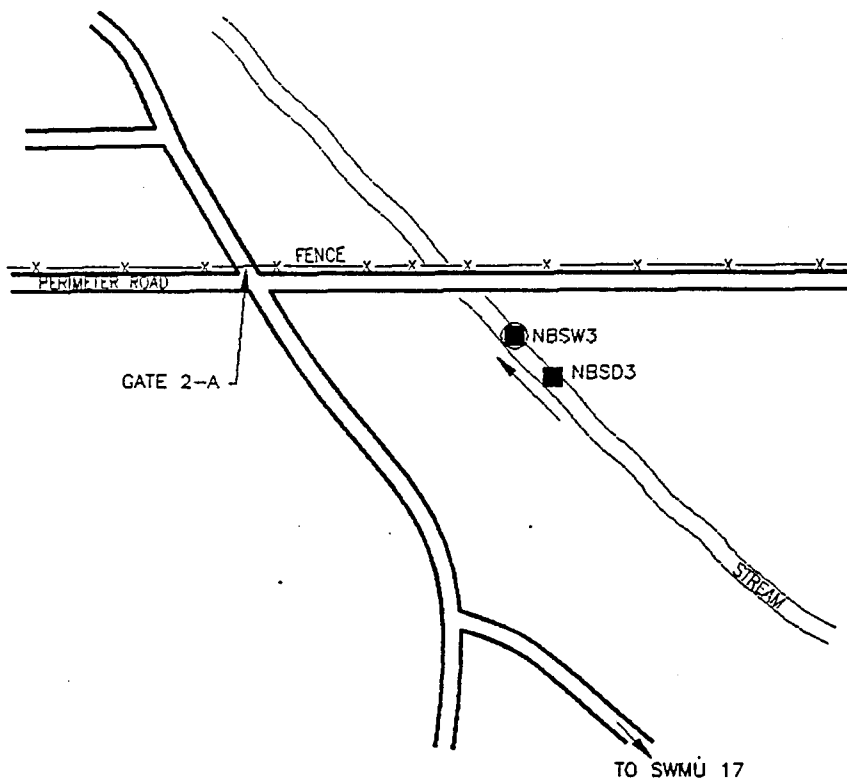
FIGURE
NO.
5-15

FORT McCLELLAN
MILITARY RESERVATION



LOCATION OF DETAIL

SITE PLAN



0 250 500
APPROXIMATE SCALE IN FEET

LEGEND



SEDIMENT SAMPLE



SURFACE WATER SAMPLE



APPROXIMATE DIRECTION OF FLOW

NORTHERN BOUNDARY
SITE NO.3 SAMPLE LOCATIONS

SITE NAME/LOCATION

AMMUNITION STORAGE AREA
ANNISTON ARMY DEPOT
ANNISTON, ALABAMA

REVISIONS

OWN BY	DATE	CHKD BY	DATE
HJM	7/16/92	CAF	7/20/92
KFR	2/26/93	BHK	2/19/93

JACOBS
PROJECT
NO.

35G30600



JACOBS ENGINEERING GROUP INC.
Southern Region - Washington, D.C.

FIGURE
NO.

5-16

SECTION 6

NATURE AND EXTENT OF CONTAMINATION

The nature and extent of contamination has been initially identified during the Expanded Site Inspection (ESI) and will be more thoroughly defined during the remedial investigation. The extent of contamination was therefore not calculated or assessed during this investigation, but the nature of contamination was determined. Tables 5-1 through 5-4 evaluated the concentration of inorganic analytes from samples considered to be control samples. Concentrations of each inorganic analyte were averaged and doubled to develop a screening value to assess potential contamination in other samples. Organic contamination is considered to be possible for all compounds whose concentrations are in excess of the certified reporting limit (CRL). A summary of the analytical results is provided with an assessment of the behavior and fate of contaminants, contaminant indicators, and a conceptual model of contaminant migration.

6.1 SUMMARY OF ANALYTIC RESULTS

Section 5.3 presented a tabulation of the analytical results of sampling for groundwater, soil borings, surface soil, sediment, and surface water that exceeded control screening values for each solid waste management unit (SWMU). These results are briefly summarized below.

Contaminants detected above control screening values in all media were primarily inorganics and nitrate/nitrite. Organic compounds were detected with lower frequency than inorganic analytes.

Organic compounds detected in groundwater samples include:

- HMX in SWMU #10;
- RDX in SWMU #10;
- 4-Nitrotoluene in SWMU #17;
- Acetone in SWMUs #11, 15, and 17; and
- Bis(2-ethylhexyl) phthalate in SWMU #27.



Organic compounds detected in sediment samples include:

- TPHC in SWMU #17;
- Methyl ethyl ketone in SWMU #5;
- Acetone in SWMU #5;
- PCB 1254 in SWMU #5; and
- Coal tar derivatives in SWMU #5, including:
 - Benzo(a)anthracene;
 - Benzo(a)pyrene;
 - Chrysene; and
 - Fluoranthene.

Organic compounds detected in soil boring samples include:

- TPHC in SWMUs #15, #16, #17, and #35;
- Acetone in SWMUs #26, and #27;
- Methylene chloride in SWMU #26; and
- Trichloroethylene in SWMU #27.

Organic compounds detected in surface soil samples include:

- HMX in SWMU #14;
- 2,4,6-Trinitrotoluene in SWMU #10;
- 2,4-Dinitrotoluene in SWMU #17;
- Nitroglycerin in SWMU #17; and
- TPHC in SWMUs #15, #16, #17, and #35.
- SVOCs at SWMU #37
- Methylene chloride at SWMU #37
- Trichloroethylene at SWMU #37
- Trichlorofluoromethane at SWMU #37
- Toluene at SWMU #37



With one exception, no organic vapors were detected by organic vapor analyzer (OVA) during the soil boring program at any SWMU. Vapors were detected by flame ionization detector (FID) at one borehole location (91B12, SWMU #11) at a depth of 50 to 55 feet at a concentration of 28 ppm. However, methane interference with the instrument is possible, and analysis of the groundwater from the well completed in the borehole indicates no VOC contamination. Similarly, all other analytical data from the ASA indicated that site soil, sediment, surface water, and groundwater samples are virtually free of VOCs.

6.2 BEHAVIOR AND FATE OF RELEASES

A factor that significantly affects any conclusions which can be drawn about the nature and extent of contamination is the mobility of contaminants in the environment. In the subsurface, mobility is largely due to the solubility of contaminants in water. Solubility, in turn, is controlled by a number of synergistic factors which cause shifts in chemical equilibrium. These factors include vapor pressure, the pH and temperature of the water, and the concentrations of other dissolved constituents. In evaluating the mobility of a specific analyte or compound it is important to consider that changes in the chemical equilibrium of an element in groundwater can have significant effects on the solubility of other elements or compounds. For example, changes in potassium and manganese concentrations affect the solubility (and mobility) of cobalt.

6.3 ASSESSMENT OF DETECTED ELEMENTS AND COMPOUNDS

A discussion of the potential sources of contamination and their fates, is presented below by analyte or compound.

Acetone — Acetone was detected in several groundwater samples in concentrations ranging up to 21 µg/l; in one sediment sample from SWMU #5 at 0.14 µg/g; and in two soil boring samples in concentrations of 0.045 µg/g and 0.064 µg/g. Acetone is an ubiquitous laboratory solvent and is also used as a paint, varnish, and lacquer solvent and as a part cleaner.

Aluminum — Aluminum was detected above control screening values in groundwater, soil borings, and surface soil samples. Aluminum in groundwater was reported at concentrations ranging up to 31,600 µg/l; the maximum value for soil borings is 27,000



µg/g; and for surface soils 56,000 µg/g. The concentration in the single surface water sample for SWMU #5 was 111 µg/l. At low pH in surface waters, Al^{+3} is soluble and can be toxic to aquatic organisms. Under the groundwater pH conditions at the site, most aluminum will be in the form of relatively insoluble hydroxides (microcrystalline gibbsite, bayerite, and other amorphous precipitates). Aluminum detected in soil and groundwater is possibly the result of naturally occurring clay minerals.

Barium — Barium, a common alkaline earth element, was detected above the control screening value in several soil borings at concentrations up to 547 µg/g. Surface soil sample concentrations ranged up to 954 µg/g. The single surface water sample for SWMU #5 had a level of 188 µg/l. No barium was detected above the control screening value in groundwater samples or sediment samples. Barium is found naturally in carbonate and igneous rocks. Salts of this element are used in the manufacture of paints, linoleum, and paper. Under pH conditions common to the site, barium usually occurs in the form of insoluble barium sulfate, which greatly limits its mobility. The source of barium detected in soil and groundwater is possibly natural clays and other weathered material.

Beryllium — Another alkaline earth element, beryllium was detected in each of two groundwater samples from SWMUs #5 and #17 at identical concentrations of 3.22 µg/l; in soil boring samples in the range up to 3.66 µg/g; and in surface soils up to 2.42 µg/g. This element is highly toxic and is not normally found in surface waters. Man-made sources of beryllium include explosives and propellants. At pH values found in water at the site, beryllium ions will form polynuclear hydroxide complexes which are highly insoluble. Even at lower pH, the beryllium will be tightly bound to clay materials.

Bis(2-ethylhexyl) phthalate — Bis(2-ethylhexyl) phthalate was detected in one groundwater sample from SWMU #27 at a concentration of 41 µg/l, and one surface soil sample at SWMU #37. Bis(2-ethylhexyl) phthalate is used industrially as a plasticizer for many resins and elastomers and is also used as a vacuum pump liquid.

Cadmium — Cadmium was detected in one groundwater sample from SWMU #17 at a concentration of 18.4 µg/l, in one soil boring and one sediment sample at concentrations of 6.51 and 0.899 µg/g, respectively, and in several surface soil samples collected throughout the ASA at values up to 22.1 µg/g. Cadmium is not a common component of rocks and is often introduced to the environment through discharges from plating operations and manufacturers of batteries, paints, and plastics. It is also a common component of explosives and propellants. It is a common indicator of pollution. Data on solubility of cadmium are limited, although it is presumed that the cadmium is in the form of low to moderately soluble salts in the pH conditions at the site.

Calcium — Calcium was detected in groundwater, soil boring, surface soil, and sediment samples collected at the site in concentrations ranging up to 63,000 µg/l, 1,730 µg/g, 100,000 µg/g, and 3,850 µg/g, respectively. Calcium was detected at a concentration of 130,000 µg/l in the surface water sample from SWMU #5. At high concentrations, calcium can cause excessively hard water resulting in poor taste and pipe scaling. A possible source for calcium is the carbonate rock which underlies the site. Calcium is probably the most common cation found in natural waters although free Ca^{+2} in the water is rare under equilibrium conditions. Calcium is tied directly to the carbon cycle which is equilibrium-driven, largely due to changes in pH.

Chromium — Chromium was detected above the control screening value in groundwater, surface soil, and soil boring samples at concentrations ranging up to 145 µg/l, 114 µg/g, and 70.8 µg/g, respectively. There are no natural sources of chromium at the site; on-site chromium contamination probably results from plating or painting activities. Chromium has also been employed as a component of laboratory cleaning solutions and is a component of explosives. Under the groundwater conditions found at the site, hexavalent chromium will be present as chromates and dichromates; trivalent species are hydrolyzed and precipitate as chromium hydroxide leaving a minor amount in solution.

Coal Tar Derivatives — Benzo[a]anthracene (0.51 µg/g), benzo[a]pyrene (0.58 µg/g), chrysene (0.71 µg/g) and fluoranthene (0.88 µg/g) were detected in a sediment sample from SWMU #5. These three compounds were also found in the surface soil at SWMU #37, together with benzo(b)fluoranthene, benzo(g,h,i) perylene, benzo(k)fluoranthene, ideno(1,2,3-c,d) pyrene, phenanthrene, trichlorofluoromethane and pyrene. All of these compounds have low water solubility and tend to bind to the soil matrix. These compounds are components of coal tar which is used in the production of coatings, dyes, and luminescent surfaces. They are also known as polynuclear aromatic hydrocarbons (PAHs).

Cobalt — Cobalt was detected in several groundwater samples at concentrations up to 433 µg/l; in soil boring samples at concentrations up to 66.8 µg/g, and in surface soil samples at concentrations up to 90.8 µg/g. No cobalt was detected above the control screening value in sediment or surface water samples collected on site. Cobalt is considered a carcinogen; it has a limited distribution in the environment. Cobalt is readily adsorbed by colloidal particles of oxides and hydroxides of magnesium and iron, two common constituents found in samples. As in the cases of aluminum and barium, the cobalt detected is possibly associated with sediment in the water samples.

Copper — Copper was found in several soil boring samples at concentrations up to 146 µg/g. Surface soil sample concentrations ranged up to 453 µg/g. One sediment sample had a concentration of 97.6 µg/g. No copper was found in the groundwater in excess of the control screening value. In natural waters like those at the site, copper has a low to moderate solubility which is probably limited by the presence of cuprous oxide and hydroxy-carbonate minerals. Copper is a naturally-occurring element found in local rocks. It is also widely used as a preservative and as an algicide.

Cyanide — Cyanide was detected at a concentration of 1.92 µg/g in one surface soil sample at SWMU #26. Any detection of this toxic ion is considered to be an indication of contamination. Cyanide ion CN^- is strongly basic and reacts with alkali metals such as calcium, potassium, and sodium to form cyanide compounds ($\text{Ca}(\text{CN})_2$, KCN, NaCN) which are relatively water soluble. Sources of cyanide include plating wastes, mine tailings and ore recovery operations, and propellants.

Explosives — HMX was detected in one groundwater sample from SWMU #10 at a concentration of 86 µg/l. RDX was detected in two groundwater samples from SWMU #10 at 4.56 and 40.6 µg/l. 4-Nitrotoluene was detected in one groundwater sample from SWMU #17 at 2.25 µg/l. 2,4,6-Trinitrotoluene was detected in a surface soil sample at SWMU #10 at a concentration of 1.28 µg/g. HMX was detected at a concentration of 1.01 µg/g in a surface soil sample at SWMU #14. 2,4-Dinitrotoluene and nitroglycerine were detected in a surface soil sample at SWMU #17 at concentrations of 0.448 and 17.6 µg/g, respectively. At the concentrations detected, these compounds do not present an explosion hazard.

Iron — Iron has been detected above the control screening value in groundwater, soil boring, and surface soil samples, with maximum values of 99,000 µg/l, 53,000 µg/g, and 69,000 µg/g respectively. Iron was detected at 481 µg/l in the surface water sample from SWMU #5. Iron is an abundant and widespread constituent of rocks at the site. Under reducing conditions (such as in groundwater) iron is present as the soluble ferrous ion (Fe^{+2}) or complexed with organic molecules. As the pH approaches neutrality, ferrous ions are oxidized to the relatively insoluble ferric state (Fe^{+3}) which can form complexes with organic molecules.

Lead — Lead was detected above the control screening value in two groundwater samples at a concentration of 100 µg/l. Soil boring concentrations ranged up to 136 µg/g, surface soil concentrations ranged up to 9,100 µg/g, and sediment concentrations ranged up to 45.1 µg/g. Lead is a highly toxic metal. Lead is a common trace component of rocks at the site and is normally found in the Pb^{+2} oxidation state. The solubility of lead in water is very pH dependent. Under groundwater pH conditions at the site, lead will most commonly form complexes with carbonate and sulfate minerals which are only slightly soluble in water.

Magnesium — Magnesium was detected in all groundwater, soil boring, surface soil, and sediment samples. Groundwater concentrations range up to 33,000 µg/l, soil boring concentrations to 1,990 µg/g, surface soil concentrations to 59,000 µg/g, and sediment concentrations to 1,190 µg/g. Magnesium was detected in the surface water sample for SWMU #5 at a concentration of 12,200 µg/l. Magnesium has not been determined to be detrimental to human health or the environment; however, in high concentrations it can impart a distasteful quality to drinking water and is a significant contributor to water hardness. This element can be derived from igneous and sedimentary rocks and is quite soluble in water in its only ionization state (Mg^{+2}).

Manganese — Manganese was detected above the control screening value in one groundwater, one sediment, and several soil boring and surface soil samples. The manganese concentration in the groundwater sample was 18,000 µg/l, the sediment sample concentration was 1,400 µg/g. Surface soil concentrations ranged up to 7,100 µg/g. Soil boring concentrations ranged up to 3,600 µg/g. The surface water sample from SWMU #5 had a detected concentration of 1,010 µg/l. When water containing high concentrations of manganese is exposed to air and oxygenated, it will become turbid from the formation of colloidal material due to the oxidation of manganese to the Mn^{+4} state. Manganese is a common element at the site and is found in both igneous and sedimentary rocks primarily as oxides and hydroxides in which the oxidation state of the element is +2, +3, or +4. These oxides tend to adsorb other metallic cations very strongly. Under site groundwater conditions, the most commonly occurring oxidation state of manganese is as the divalent cation Mn^{+2} . In surface waters and soils the predominant state of manganese varies with the degree of oxidation and the presence of organic materials.

Mercury — Mercury was detected in samples from six soil borings at concentrations ranging up to 0.52 µg/g. Mercury is a highly toxic element; it is a rare element in natural waters and its presence almost always is a result of human activity including pesticide application and disposal of industrial and mining wastes; mercury is also a component of explosives. A unique characteristic of elemental mercury among metals is its ability to volatilize at relatively low temperatures. At the site, most mercury will be in the form of oxides of low solubility and mercury will most probably be bound to sediments.

Methylene chloride — Methylene chloride was detected in one soil boring sample at SWMU #26 a concentration of 0.03 µg/g. Methylene chloride is a very common laboratory solvent and is also commonly used in paint removers and thinners, solvent degreasing, plastics processing, and aerosol propellants.

Methylethyl ketone — Methylethyl ketone was detected in one sediment sample from SWMU #5 at a concentration of 0.025 µg/g. Methylethyl ketone is used as a laboratory solvent and is also commonly used in paint removers, resins and cements, manufacture of smokeless powder, printing, and acrylic coatings.

Molybdenum — Molybdenum was detected above the control screening value in surface soil samples up to 16.5 µg/g. Molybdenum under site conditions is probably present in an anionic species (molybdate) and its concentration is possibly due to the presence of molybdenum deposits in rocks.

Nickel — Nickel was detected in two groundwater samples in concentrations of 128 and 180 µg/l, and in several soil boring and surface soil samples. Concentrations ranged up to 61 µg/g for soil boring and up to 84.4 µg/g for surface soil samples. Nickel has been identified as a carcinogen; it is a fairly common trace component of rocks at the site. It is used in the electroplating industry and is present in trace quantities in explosives. Under conditions at the site, most nickel will be in the oxidation state of Ni^{+2} which is strongly adsorbed by iron and manganese oxides. The nickel detected in the samples is in low concentrations and is probably in soil bound compounds.

Nitrate/Nitrite — Nitrate/nitrite was detected in all groundwater samples (when analyzed) at the site in concentrations ranging up to 1,050 µg/l. It was detected at 2.07 µg/g in one sediment sample, at SWMU #10 and at 4.14 µg/g in one surface soil sample at SWMU #10. It was detected at SWMU #11 in two soil borings at 1.41 and 2.58 µg/g. Nitrite and nitrate generally result from the two-step breakdown of proteinaceous materials and ammonia in the groundwater; it can also result from the decomposition of certain explosives. Nitrate is the predominant form in the environment because nitrite (the intermediate step) is rapidly assimilated by nitrate-producing bacteria. It is very soluble in water. Nitrate is a plant nutrient which may contribute to increased eutrophication of surface waters.

Polychlorinated biphenyl — PCB 1254 was detected in a single sediment sample at SWMU #5 at a concentration of 0.21 µg/g. PCBs have been widely used as insulation around wiring and as a coolant in electrical capacitors and transformers.

Potassium — Potassium is an alkali metal which was detected above the control screening value in groundwater, soil boring, and surface soil samples. The concentration range for was 12, 300 µg/l; soil borings was up to 928 µg/g; the range for surface soils was up to 1,850 µg/l. The surface water sample for SWMU #5 had a detection of 20,200 µg/l. Potassium is a common element found in sedimentary rocks and does not readily remain in solution. Potassium minerals in silicate rocks are very resistant to attack by water. Potassium in solution is readily reincorporated into clay materials. The concentrations reported for the groundwater samples are possibly due to the presence of clays in the unfiltered sample.

Silver — Silver was detected in one groundwater sample at a concentration of 105 µg/l from SWMU #26 and from two surface soil samples at concentrations of 2.65 and 2.92 µg/g. Silver is a rare metal which may occur naturally in low concentrations in areas of igneous rock. It may also be introduced to natural waters from electroplating operations and is a component of explosives and propellants. In groundwater at the site silver will be most likely found as silver oxide which has a moderate-to-low solubility in water.

Sodium — The alkali metal sodium was detected in several groundwater samples in concentrations ranging up to 38,400 µg/l. A concentration maximum of 278 µg/g was observed in soil boring samples; surface soil samples had concentrations ranging up to 177 µg/g. The surface water sample concentration for SWMU #5 was reported as 2,810 µg/l. In combination with other cations, excess sodium in soil can cause swelling which results in decreased permeability. Sodium is very soluble in water but can be adsorbed by minerals with high cation exchange capacities such as clays. Its presence in soils and waters at the site is possibly due to weathering and dissolution of evaporite rocks and connate water.

Thallium — Thallium was detected in one groundwater sample from SWMU #17 at a concentration of 2.64 µg/l. Thallium is a rare metal of low solubility under site conditions and will be present primarily as oxide minerals. Thallium is introduced to the environment when used in rodenticides and insecticides; as catalysts in certain organic syntheses; in the production of dyes and pigments; in the manufacture of lenses and optical equipment, fireworks, and imitation precious jewelry; and in mineralogical analysis.



Total Organic Carbon (TOC) — TOC was detected in one groundwater sample from SWMU #14 at a concentration of 3,150 µg/l; in two soil boring samples at 772 and 6,970 µg/g; in two sediment samples taken at SWMUs #10 and #11 at concentrations of 3,680 and 9,230 µg/g; and in one surface soil sample at a concentration of 17,900 µg/g. TOC is a measure of the organic matter in a sample and includes both refractive and non-refractive carbon compounds, cellulose and lignins, respectively. TOC components may be soluble or insoluble in groundwater.

Total Petroleum Hydrocarbons (TPHC) — TPHCs was detected in six soil boring samples, ten surface soil samples, and two sediment samples at concentrations ranging up to 62.8 µg/g, 658.0 µg/g, and 110 µg/g, respectively. Detection of TPHCs in the environment is considered indicative of contamination. TPHCs are representative of the less volatile, higher molecular weight petroleum products including diesel fuel, kerosene, hydraulic fluids, oils, and petrochemical residuals. These compounds have low solubilities in water and are generally adsorbed onto sediments.

Trichloroethylene — Trichloroethylene was detected in one soil boring sample from SWMU #27 at a concentration of 0.011 µg/g and in one surface soil sample from SWMU #37. Trichloroethylene is used in metal degreasing, dry cleaning, electric parts cleaners, paint and adhesive thinners, as an extraction and solvent, and as a refrigerant and heat exchange liquid.

Vanadium — Vanadium was detected in several groundwater samples at concentrations ranging up to 109.0 µg/l. Several soil boring samples also contained vanadium in concentrations ranging up to 76.5 µg/g. Several surface soil samples contained vanadium in the range of up to 83.4 µg/g. Vanadium is not a rare element and is present in low concentrations in rocks at the site. It is widely used as a catalyst in chemical production, is a by-product from the petrochemical industry, and is a component of explosives and propellants. Under site conditions, vanadium can be found in a variety of oxidation states and may be stable in both anionic and cationic species. Depending on pH and other electrochemical factors, the solubility of vanadium and its compounds is highly variable.

Zinc — Zinc was detected in most groundwater, soil boring, surface soil, and sediment samples at concentrations up to 1,240.0 µg/l, 336.0 µg/g, 969.0 µg/g, and 422 µg/g, respectively. The surface water sample for SWMU #5 had a concentration of 450 µg/l. Zinc is a very common element of sedimentary rocks at the site. It has been widely used to galvanize other metals and is a component of explosives and propellants. Under site conditions, most zinc will be in the form of zinc hydroxide or zinc carbonate.

6.4 CONTAMINATION INDICATORS

For purposes of this ESI, any detection of inorganic analytes above control screening values is considered to be an indicator of potential contamination. This includes the inorganics barium, calcium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium,



silver, sodium, vanadium, and zinc which may have significant natural contributions to the levels detected at the site. Although the detections of these elements may be mostly or entirely due to variations in the natural distributions of these elements, the control sample regimen adopted by this ESI does not provide a sufficient statistical base to exclude these elements as indicators of potential contamination.

The detection of any organic compound above its detection limit is considered to be an indicator of potential contamination.

6.5 CONCEPTUAL MODEL

A conceptual model is a graphical depiction of the sources, pathways, and receptors for contamination. The conceptual model for the ASA was developed based upon evidence of past practices, contained in ANAD records and reports of previous investigations which could have resulted in release of contaminants; the results of the field investigation work, local soil and hydrogeological conditions; and ecological and consideration of demographic factors related to the ASA and adjacent areas. Primary and secondary sources of contamination are described and contaminant release mechanisms are portrayed. The migration pathways for contaminants are identified, as are potential receptors and exposure routes such as ingestion, inhalation, and dermal contact.

Generally, the nature of the contaminant tends to govern the migration pathway and, consequently, the type of receptor exposed. For example, airborne contaminants can be transported great distances and affect biota and human receptors far from the sources. Similarly, soluble contaminants in ground or surface waters can be transported down-gradient and may affect distant agricultural, recreational, and municipal supply users. Under different circumstances insoluble contaminants may be closely bound to sediments and have little chance of migrating from the primary source of contamination. With the pathway identified, data on sensitive areas, on-site activities, and proximity to human receptors are incorporated into the conceptual model. The exposure routes to the receptors depend upon the toxicological nature of the contaminant.



Contamination indicators exhibit similar characteristics for transport through the environment (e.g. primarily water insoluble, sediment bound and transported, atmospheric release as dust and fumes). A conceptual model for these elements and compounds is presented in Figure 6-1. The primary sources of contaminants are depicted as the SWMUs. In many cases, specific site activities which could be a source of the contaminants can be identified. Specifically:

Cadmium — Cadmium may be a trace component of the explosives and propellants disposed of at SWMU #17; it may also be a residual from scrap steel and paint chips.

Chromium — The occurrence of chromium in most samples may be due to several man-induced factors, including explosive handling and disposal, dust transport, and waste management.

Cyanide — Cyanide was detected in a single surface soil sample at SWMU #26. It is possibly a residue from plating materials used for site vehicles and equipment.

Coal Tar Derivatives — A variety of hydrocarbons were detected in a sediment sample from SWMU #5. The possible sources are the creosote-treated railroad ties which were observed on the bottom of the sinkhole (SWMU #5).

Explosives — Explosives were detected at SWMU #11 (TNT Washout Facility Leaching Beds) and SWMU #17 (Demolition Pit). The detections are obviously results of past disposal operations at those locations.

Lead — Lead was detected at several SWMUs. Lead is a component of paints and old piping, and is a by-product of the combustion of gasoline and diesel fuels. It also is widely used as the projectile material in ammunition. Its widespread occurrence in samples and high levels in SWMU #37 samples suggest that airborne dispersion of this element has occurred.

Nickel — Nickel was detected at SWMU #17 (Demolition Pit) and SWMU #5 (Sinkhole). Nickel is a trace constituent of explosive compounds. Its occurrence at the SWMUs may be the result of explosive disposal and waste management practices (e.g., dumping in the sinkhole).

Silver — Silver was detected at SWMU #26 (North TNT Burial Pit). It is a trace element often used as a catalyst in explosives and propellants.

TPHCs — TPHCs were detected at SWMU #15 (Propellant Disposal Facility), SWMU #16 (Burning Ground), and SWMU #17 (Demolition Pit). Primary sources for TPHCs at these sites are likely to be oil and hydraulic fluid leaks from vehicles and equipment and flammable liquids which may have been used to initiate combustion.

Vanadium — Vanadium was widespread about ANAD. It may be a trace component of explosives and propellants and may have been dispersed by the wind during demolition activities or transported around the site during waste disposal.

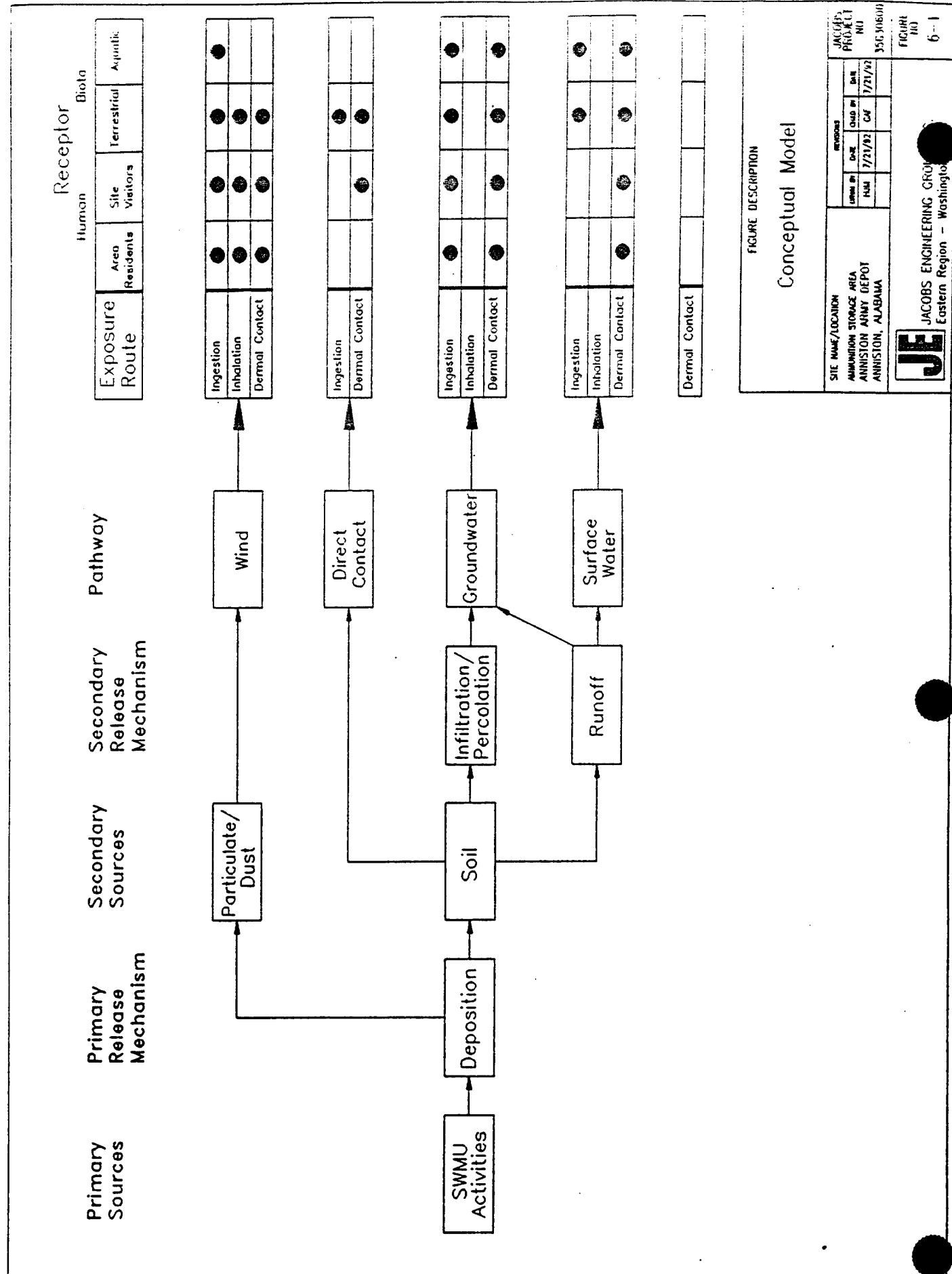


FIGURE DESCRIPTION

Conceptual Model

SITE NAME/LOCATION AMMUNITION STORAGE AREA ANNISTON ARMY DEPOT ANNISTON, ALABAMA	REVISIONS			JACOBS PROJ. # 11
	DATE	BY	DATE	NO.
	7/21/92	CAF	7/21/92	350 M0500
JACOBS ENGINEERING GROUP Eastern Region - Washington				FIGURE NO. 6-1

Contaminants, once deposited on the ground, may follow several pathways through secondary sources and release mechanisms before reaching human and biotic receptors. Figure 6-1 depicts a conceptual model for non-volatile contaminants and is applicable to all SWMUs.

As seen in Figure 6-1, the wind pathway is of concern because large portions of the soil entrained by the wind are fine particles which may contain soil-bound contaminants such as beryllium, cadmium, and lead. Fine particulates have the greatest potential for penetrating deep within the respiratory tracts of receptors, where the most severe toxicological effects can occur. Additionally, the finer the particulate, the greater the dispersion distance between the primary and secondary sources. Therefore, contaminants in wind-borne particulates are a concern to on-site workers and visitors, area residents, and biota.

Workers and visitors to the site and on-site biota may be subjected to soil-borne contamination by direct contact with the material. Primary entry routes for contaminants in humans is through the skin and eyes. Skin adsorption of the contaminants arsenic and chromium are of particular concern. Biota which are most affected by direct contact with contaminants in the soil include plants through uptake of materials through the roots and by direct contact with outer tissues, and soil dwelling invertebrates and vertebrates. Excessive uptake of certain elements (sodium, manganese) can adversely affect plant growth primarily through disruption of ionic equilibrium between the soil and plant roots. The contaminant can then be transmitted further in the food chain when these plants and animals are ingested by higher order herbivores (deer, cattle, dove) and carnivores (pygmy rattlesnake, red-tailed hawk, humans). Pollutants which have cumulative effects with chronic exposure such as lead or mercury can cause severe systemic distress in individuals.

Precipitation on contaminated soils and other surfaces can transport contaminants by two pathways. Contaminants which are more soluble in water may infiltrate into the groundwater table. The degree to which a soluble contaminant is dispersed is dependent upon aquifer characteristics such as hydraulic gradient, porosity, and permeability of the sediment/rock matrix. Isolated perched aquifers are most likely to be affected by infiltrating contaminants at the ASA. Based on historical hydrogeological data, the transmissivity of isolated perched aquifers does not facilitate the rapid dispersal of soluble contaminants.



Precipitation can also transport contaminants to soils by surface runoff. Depending on such factors as rainfall intensity, soil particle size, topographic slope, and degree of vegetative cover, sediment loads in runoff can be very high. Any sediment will ultimately be deposited once the flow is dissipated, usually in a pond, creek, or other body of surface water. Runoff discharged into depressions may subsequently percolate through the soil into the surficial aquifer. Soil deposits in stream channels may be transported long distances from the site and affect significant numbers of downstream users of water resources. Surface water runoff carrying significant loads of soluble nutrients such as nitrates and TOC can accelerate the eutrophication process in lake and pond systems. Stagnation in lakes, especially in the summer can contribute to reduction in dissolved oxygen concentration, algal blooms, and fish kills. Plant uptake or ingestion by animals of contaminated surface water may be a factor. The primary exposure path for human receptors is through direct contact with the water (e.g. swimming).



SECTION 7

COMMUNITY RELATIONS

In November of 1990, ANAD RMD personnel conducted interviews with residents of Anniston and surrounding communities to determine their concerns about ANAD. The primary environmental concerns expressed by the public included ANAD's impact on Coldwater Spring (the source of drinking water for 72,000 local residents), the chemical demilitarization program, the effect of discharges on the pygmy sculpin (a small fish considered threatened whose critical habitat encompasses portions of ANAD and adjacent waters), and general contamination at the 44 SWMUs at the facility.

To respond to public concerns, a Public Involvement and Response Plan (Community Relations Plan) was issued in October 1991. The objective of the plan is to provide techniques that will ensure effective communication between the Army, government agencies, and the public regarding the environmental studies ongoing at ANAD.

The plan was designed to fulfill the requirements contained in CERCLA (including Section 117 of SARA), the Army Public Affairs Plan for Installation Restoration Programs, EPA guidance and publications on public involvement in the Superfund Program and CERCLA compliance with other environmental statutes, the Office of Solid Waste's Superfund Community Relations Publication, and the National Oil and Hazardous Substances Pollution Contingency Plan.

Implementation of the Community Relations Plan provides concerned parties with opportunities to review and comment on Remedial Investigation and Feasibility Study plans prepared for ANAD and on recommended remedial action alternatives. It also provides the media with the information they need, identifies issues and areas of concern, and provides for a single entity for dissemination of information regarding the environmental work being conducted at ANAD.

The plan specifies communication techniques to be employed and places responsibility for employing each technique on various personnel at ANAD and other Army commands. There is regular communication between ANAD and the EPA, the U.S. Army Environmental Center, Calhoun County,



the City of Anniston, the Alabama Department of Environmental Management, members of the media, the general public, and the employees at ANAD.

Communication techniques include project status meetings, milestone meetings, news and press releases, a technical review committee, public meetings, a community information line, onsite tours, information repositories, and policy letters.



SECTION 8

CONCLUSIONS AND RECOMMENDATIONS

The Expanded Site Inspection (ESI) of the Anniston Army Depot (ANAD) Ammunition Storage Area (ASA) focused on identifying and evaluating possible contamination of soils, sediments, groundwater and surface water that may have been caused by past activities at fifteen solid waste management units (SWMUs). Activities undertaken as a part of the ESI included review of historical file material; interviews with ANAD personnel; evaluation of data in previous remediation reports; field activities including visual observations, geophysical surveys, installation of groundwater monitoring wells and collection of groundwater, surface water, surface and subsurface soil, and sediment samples for laboratory analysis; and an evaluation of reported laboratory data to support conclusions on possible contamination to make recommendations on further remedial actions.

8.1 GENERAL CONCLUSIONS

Contamination from volatile organic compounds is not a concern in the ASA. Vapors detected at only one borehole (91B12 in SWMU #11) are believed to be the result of methane interference since analysis of the groundwater from the well completed at this borehole showed no volatile organic compound (VOC) contamination. No volatile or semi-volatile compounds were detected in surface soil samples. The positive correlation between non-detections of VOCs in the field and non-detections in the laboratory data suggests the absence of VOCs.

During the remedial investigation, it is recommended that surface water samples be collected for background characterization. Background surface water samples should be analyzed for full scan parameters to define background concentrations. Surface water samples should be collected at locations that have not been impacted by past waste management activities. The analytical results generated should then be compared with SWMU-specific surface water samples to assess the presence of contamination caused by activities at the ASA.



To provide better information on the groundwater flow direction, gradient, and velocity in the aquifers, it is recommended that additional monitoring wells be installed, monitored, and sampled. Groundwater samples from these wells should be analyzed for full scan parameters to define background concentrations. The monitoring wells should be installed at locations that have not been impacted by past waste management activities. Analytical results from the background monitoring wells should then be compared with the results from other monitoring wells to assess the presence of contamination in the groundwater caused by activities at the ASA.

The elements or compounds detected above background are considered to be evidence of potential contamination as described in the SWMU-by-SWMU presentation in the following sections.

8.2 SWMU-BY-SWMU CONCLUSIONS AND RECOMMENDATIONS

8.2.1 SWMU #5 — Sinkhole

Description: The Sinkhole is a water-filled, 0.63 acre depression located east of the B-block of storage igloos in the ASA. SWMU #5 was used periodically from 1942 to 1978 for disposal of various wastes. The Sinkhole was cleared of most dumped debris in 1978 (USAEHA, 1986a).

Investigation: Four surface soil samples, one sediment sample, one surface water sample, and two groundwater samples were used to evaluate SWMU #5.

Potential Contamination: The indicators of potential contamination detected in the samples were inorganics, PCB 1254, and coal tar derivatives in the sediment sample; and inorganics in the surface soil, groundwater, and surface water samples.

Recommendation: As potential contamination from prior disposal activities cannot be ruled out, it is recommended that further investigative action be undertaken at this SWMU as a part of the planned RI at the ASA.



8.2.2 SWMU #8 — Acid Disposal Pit

Description: The Acid Disposal Pit is located in a highly restricted, remote area of the ASA between the C and G-blocks of storage igloos. The concrete pit was used from 1959 to 1961 for the disposal of various chemicals. It has been filled in and is now overgrown with trees and grass.

Investigation: Physical evidence of the pit has been obscured to such an extent that it could not be located by field observation or geophysical survey. Consequently, no samples pertinent to the characterization of the site were collected. Since the conclusion of ESI field activities, historical aerial photographs not previously available have been reviewed. They suggest that no disposal activity had occurred in the areas that were investigated during the ESI. Subsequently an original photograph of the SWMU and a reinspection of an area nearby indicates that this area may be the actual location.

Potential Contamination: No sample data are available to evaluate SWMU #8.

Recommendation: It is recommended that further attempts be made to locate this SWMU and samples be collected to evaluate the potential for contamination spread at SWMU #8. This work should be incorporated into the planned RI at the ASA.

8.2.3 SWMU #10 — TNT Washout Facility

Description: SWMU #10 is located in the central portion of the ASA in a restricted access area approximately 3,300 feet north of I-block and 100 feet from Building 172. From 1948 to the mid-1950's, and sporadically after that, slurry from munitions washout operations was discharged from Building 172 into the sedimentation tank. Overflow from the tank was discharged to leaching beds (SWMU #11).

Investigation: One surface soil sample, two sediment samples, 11 soil boring samples, and two groundwater samples were collected to evaluate SWMU #10.



Potential Contamination: The indicators of potential contamination detected in the samples were calcium, nitrate/nitrite, and the explosive 2,4,6-trinitrotoluene in the surface soil sample; inorganics, nitrate/nitrite, and the explosives HMX and RMX in the groundwater samples; and calcium, TOC, and nitrate/nitrite in the sediment samples.

Recommendation: Based on the detection of explosives in the surface soil and groundwater samples, it is recommended that further investigative action be undertaken at SWMU #10 as a part of the planned RI at the ASA.

8.2.4 SWMU #11 — TNT Washout Facility Leaching Beds

Description: The leaching beds are located across the road from SWMU #10. The beds consisted of a series of 24 parallel troughs dug into the soil, covering approximately 0.75 acres. The beds received explosives washout waste water from 1948 to the mid-1950's, and sporadically thereafter. Explosives concentrations in the beds are reportedly in the range of up to 60%.

Investigation: Two surface soil samples, two sediment samples, six soil boring samples, and one groundwater sample were collected to evaluate SWMU #11. Four more groundwater samples were planned, but two of the wells to be sampled could not be located and two others were too badly damaged to be used.

Potential Contamination: The potential indicators of contamination detected in the samples include inorganics in the surface soil; inorganics and acetone in groundwater samples; nitrate/nitrite in the soil boring samples; and manganese, and TOC in the sediment samples.

Recommendation: The lack of soil samples from within the SWMU and sufficient groundwater samples in the vicinity of the SWMU presents a gap in the data required to

perform an evaluation of potential contamination. It is recommended that further investigative action be undertaken at this SWMU as part of the planned RI at the ASA.

8.2.5 SWMU #14 — Laundry Waste Leaching Facility

Description: SWMU #14 is located northeast of SWMU #10 and north of the I-Block of storage igloos. From 1948 to 1973, this SWMU was used to dispose of wash water from the explosives handlers laundry. Waste water from the washing machine was piped to an above grade sump and then to the leaching bed. Runoff from the leaching bed discharged to a stream. The laundry was demolished circa 1973.

Investigation: Four surface soil samples and one groundwater sample were collected to evaluate SWMU #14.

Potential Contamination: Inorganics and the explosive HMX were detected in the soil samples. TOC was detected in the groundwater sample.

Recommendation: Due to the detection of an explosive in soil samples, it recommended that further investigations be undertaken at this SWMU as a part of the planned RI at the ASA.

8.2.6 SWMU #15 — Propellant Disposal Facility

Description: SWMU #15 is located in the northwest portion of the depot, approximately 2,400 feet northeast of building S-602. Propellant disposal operations were conducted from circa 1968 to 1978. There are two disposal units, one of which was used to dispose of unsymmetrical dimethylhydrazine (UDMH), the other to dispose of inhibited red fuming nitric acid (IRFNA). Each unit consists of a concrete pads and small incinerators.

Investigation: Five soil boring, two surface soil, and two groundwater samples were collected to evaluate SWMU #15.

Potential Contamination: TPHC was detected in both the soil boring and surface soil samples. Nitrate/nitrite and acetone were found in one of the groundwater samples.

Recommendation: The TPHC contamination was detected at a relatively low concentration. However, because contamination was found, an additional field investigation is recommended for this SWMU.

8.2.7 SWMU #16 — Burning Ground

Description: The Burning Ground is located in the northwestern portion of the depot. The burning area covers approximately 6 acres. Current burning operations are conducted in steel burning pans, a burn cage, and a dunnage burning area. Materials burned include explosives, ammunition, and inert materials. Three burial pits within the SWMU boundary have been used for disposal of a variety of hazardous materials: Comp B, octal, white phosphorus, hexachloroethane, explosives, and others. The three pits are now closed and covered. A RCRA Subpart X permit application for ongoing operations has been submitted.

Investigation: Investigation was confined to the perimeter of the burning ground due to the hazardous material distributed in the area. Five soil boring, four surface soil, and two groundwater samples were collected to evaluate SWMU #16.

Potential Contamination: Indicators of potential contamination detected at SWMU #16 include TPHC and inorganics in the surface soil and soil boring samples. Inorganics and nitrate/nitrite were detected in the groundwater samples. It should be noted that although boring 91B16 was installed in very close proximity to a former white phosphorus pit, the soil boring and groundwater samples were not analyzed for phosphorus.

Recommendation: This is an active OB area with a RCRA Subpart X permit pending. Due to the active status of the site, future investigation will be managed under the provisions of the RCRA Corrective Action program.

8.2.8 SWMU #17 — Demolition Pit

Description: The demolition pit is located in the northwest corner of the depot. The pit is approximately 5 acres and contains 22 detonation sites. The pit is currently active and has been in use for at least 40 years. The pit is used for destruction of high explosive items including cartridges, bombs, grenades, rockets, warheads, etc. A RCRA Subpart X permit application for ongoing operations has been submitted.

Investigation: Three soil boring samples, two surface soil samples, two sediment samples, and one groundwater sample were collected to evaluate SWMU #17.

Potential Contamination: Indicators of potential contamination detected in SWMU #17 include inorganics and TPHC in the soil boring samples; inorganics, TPHC, and the explosives 2,4-dinitrotoluene and nitroglycerin in the surface soil samples; inorganics and TPHC in the sediment samples; and inorganics, acetone and the explosive 4-nitrotoluene in the groundwater samples.

Recommendation: This is an active OB area with a RCRA Subpart X permit pending. Due to the active status of the site, future investigation will be managed under the provisions of the RCRA Corrective Action program.

8.2.9 SWMU #18 — Old Sewage Treatment Plant

Description: The old STP is located south/southwest of the ANAD Administrative Area. The STP was used to treat domestic sewage from 1942 to 1982. It is currently used as a firefighter training area.



Investigation: Investigations at SWMU #18 were limited to a review of ANAD files and records and a site visit to observe site conditions. No field sampling was conducted for the ESI.

Potential Contamination: None determined by this ESI.

Recommendation: There was insufficient historical data to conclude that SWMU #18 activities (past and present) have had no impact on groundwater. Based on the nature of historical and ongoing activities at SWMU #18, it is recommended that further investigative action be undertaken at this SWMU as a part of the planned RI at the ASA. This investigation should include a review of old facility plans from the date of facility inception to verify the presence or absence of combined sewer lines; monitoring well installation and sampling in and around the trickling filter and oil/water separator; determination of whether or not the fire training area was/is lined, and what materials were burned in it, together with an investigation of potential releases of contaminants from these activities; and any other issues related to the SWMU's historical and current use.

8.2.10 SWMU #26 — North TNT Burial Pit

Description: The North TNT Burial Pit is located near the northern installation boundary. The pit was approximately 50 feet long and 25 feet wide. Reports suggest that wastes containing TNT may have been burned and buried at SWMU #26.

Investigation: Three soil boring samples, one surface soil sample, one sediment sample, and two groundwater samples were used to evaluate the SWMU.

Potential Contamination: Indicators of potential contamination at SWMU #26 include inorganics and VOCs in the soil boring; inorganics in the sediment sample; inorganics in the surface soil sample; and inorganics and nitrate/nitrite in the groundwater samples.

Recommendation: Due to the lack of subsurface soil samples within the SWMU boundaries, inclusion of this SWMU in the follow-up RI is recommended.

8.2.11 SWMU #27 — South TNT Burial Pit

Description: The South TNT Burial Pit is located approximately 500 feet southeast of the North TNT Burial Pit (SWMU #26). Past activities were the same as at SWMU #26

Investigation: Three soil boring samples, one surface soil sample, and two groundwater samples were collected to evaluate SWMU #27.

Potential Contamination: Indicators of potential contamination detected at SWMU #27 include inorganics and VOCs in the boring samples; lead in the surface soil sample; and inorganics, SVOCs, and nitrate/nitrite in the groundwater samples.

Recommendation: Due to the lack of subsurface soil samples within the SWMU boundaries, inclusion of this SWMU in the follow-up RI is recommended.

8.2.12 SWMU #34 — Chemical Storage Igloos

Description: Forty-one chemical storage igloos in G-block are located within this SWMU. Igloos are used to store obsolete M55 rockets containing nerve agents. The interior of each igloo is regularly monitored to detect any leaks. A RCRA Part B application covering these operations has been submitted.

Investigation: A review of ANAD files and records, and results of previous investigations led to the conclusion that no field investigation was required here.

Potential Contamination: None determined by this ESI.



Recommendation: Monitoring for contaminant releases will continue, ultimately under the RCRA permit. SWMU #34 should not be included in the ASA RI/FS.

8.2.13 SWMU #35 — Deactivation Furnace

Description: The deactivation furnace was used to deactivate small munitions (less than 600 grains energetic material up to 50 caliber). Particle emissions were collected in a bag house. Remediation of a leaking 1000 gallon diesel tank has occurred at this location. A final report on this remediation has been approved by ADEM. It is expected that operations will start again in 1993; an air emission permit from the State of Alabama and a RCRA Part B permit are pending.

Investigation: Four soil boring samples, three surface soil samples, and one groundwater sample were collected to evaluate SWMU #35.

Potential Contamination: Indicators of potential contamination detected in SWMU #35 include TPHC in the soil boring samples; inorganics and TPHC in the surface soil samples; and inorganics in the groundwater sample.

Recommendation: Due to the detection of TAL metals in high concentrations, inclusion of this SWMU in the follow-up RI is recommended. As per Section VIII (Statutory Compliance) of the FFA, follow-up activities covered by the FFA will achieve compliance with both CERCLA and RCRA remedial action/corrective action requirements, thus fulfilling any RCRA Permit requirements.

8.2.14 SWMU #36 — Drill and Transfer System Site

Description: The drill and transfer system site is where chemical agents were transferred from leaking munitions into one ton containers for safe storage. The SWMU covers about one acre. Transfer of chemicals was conducted within a glove box. Two storage sheds and a metal pavilion are located here.

Investigation: A review of ANAD files and records, and results of previous investigations disclosed no information suggesting the release of contamination from this site.

Potential Contamination: None determined by this ESI.

Recommendation: No further action. SWMU #36 should not be included in the ASA RI/FS.

8.2.15 SWMU #37 — Vehicle Wash Rack

Description: The Vehicle Wash Rack is located in the western end of Building 45, approximately 1000 feet south of the ASA fence. The two wash bays are currently in use for washing and steam cleaning depot vehicles. Waste waters are collected through floor drains, pumped through an oil/water separator and discharged to the sanitary sewer. Oils are drummed for disposal.

Investigation: Six surface soil samples were collected at SWMU #37 in order to evaluate the site. Only three of those are considered relevant to wash rack operation.

Potential Contamination: Indicators of potential contamination detected in the surface soil samples include inorganics, toluene, and SVOCs.

Recommendation: Based upon site history, the detection of organic contamination in surface soil samples, and the lack of groundwater samples, additional investigation of the SWMU is recommended.

8.2.16 Northern Boundary Sites

Description: The Northern Boundary Sites were three streams flowing out of the ASA at the northern boundary.



Investigation: One surface water/sediment sample pair was collected from each stream and analyzed for nitrate/nitrite and explosives. A fourth stream which was to have been sampled was found to be dry, so no samples were collected there.

Potential Contamination: No indicators of potential contamination were detected in the sediment samples. Nitrate/nitrite (not considered to be a "stand-alone" indicator of contamination) was detected in two of the three surface water samples.

Recommendation: Based on the sample results, there is no evidence that explosive contaminants are spreading out of the ASA via surface waters north of the site. No further action is deemed necessary.

8.3 SUMMARY

Completion of this ESI has resulted in an improved characterization of potential contamination at the 15 SWMUs that were the subject of this study. Based on the results of the field investigations, laboratory analysis of environmental samples, and analyses presented in this report, the following 11 SWMUs have been identified as requiring further investigation to confirm and evaluate potential contamination:

- SWMU #5 — Sinkhole
- SWMU #8 — Acid Disposal Pit
- SWMU #10 — TNT Washout Facility
- SWMU #11 — TNT Washout Facility Leaching Beds
- SWMU #14 — Laundry Waste Leaching Facility
- SWMU #15 — Propellant Disposal Facility
- SWMU #18 — Old Sewage Treatment Plant
- SWMU #26 — North TNT Burial Pits
- SWMU #27 — South TNT Burial Pit
- SWMU #35 — Deactivation Furnace
- SWMU #37 — Vehicle Wash Rack.



No further action is recommended at the following SWMUs:

- SWMU #16 — Burning Ground (subject to future RCRA Corrective Action)
- SWMU #17 — Demolition Pit (subject to future RCRA Corrective Action)
- SWMU #34 — Chemical Igloos
- SWMU #36 — Drill and Transfer System Site.



SECTION 9

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Appendix A
Aquatic and Terrestrial Species
in the Immediate Vicinity of ANAD

Aquatic Species

Vertebrates

Least lamprey
Redfin pickerel
Chain pickerel
Rainbow shiner
Large scale stoneroller
Alabama hog choker
Mosquito fish
Green sunfish
Warmouth
Bluegill sunfish
Redear sunfish
Bream
Largemouth bass
Coldwater darter
Carolina sculpin ("banded")
various minnows

Invertebrates

May flies
Caddis flies
Stone flies
Oligochaetes (segmented worms)
Crustaceans
 Water fleas (cladocera)
 Isopods
 Decapods (crayfish)
 Amphipods
Water boatman
Beetles
Molluscs
Snails

Terrestrial Species

Mammals/Marsupials

Deer
Squirrel
Rabbit
Opossum
Raccoon
Fox
Bobcat

Birds

Turkey
Quail
Dove
Crow

Reptiles

Eastern diamondback rattlesnake
Timber rattlesnake
Pygmy rattlesnake
Water moccasin (cottonmouth)
King snake
Chicken snake
Black snake
Rat snake

Common Grasses

Bermuda
Dallis
Johnson
Lespedeza
Lespedeza Sericea

Common Woodland Trees and Shrubs

Longleaf pine
Loblolly pine
Shortleaf pine
Slash pine
Yellow (tulip) poplar
Red (sweet) gum
White oak
Post oak
Eastern red oak
Southern red oak
Blackface oak
Red maple
Sycamore
Eastern red cedar
Dogwood
Black gum
Hickory
Black locust
Wild plum
Red bud
Chestnut oak
Virginia pine
Black walnut
Persimmon
Bluejack oak
American elm
Slippery elm
Plum
Huckleberry
Wild grape
Honeysuckle
Green briar
Crab apple
Wild cherry
Mulberry
Pecan
Blackberry

Appendix B

Field Boring Logs

This Appendix presents field boring logs describing soils acquired in the course of borings that led to completion of well installations. Information acquired from borings that did not result in completed wells is not included in these logs.

Well completion information for well 91B15 is not presented in this Appendix. Examination of field notes indicated that well 91B15 was completed with the following specifications:

- Stainless steel screen from 17 feet 10 feet below ground surface
- Stainless steel riser from 10 feet to zero feet below ground surface
- Stainless steel "stick-up" from zero feet to 2.5 feet above ground surface
- Gravel pack from 17 feet to 7 feet below ground surface
- Bentonite pellets from 7 feet to 5 feet ground surface
- Grout from 5 feet to zero feet below ground surface

FIELD BORING LOG

Project No. 20600	Project Name ANAD RI/FS TASK6	Boring No. 91311D
Contractor JEG	Driller ATEC	Page 1 of 2
Material HSA	Casing Size 7 3/4"	Completed 2.4.92
Ground at	Soil drilled	Project Level D
Logged by DAI	Checked by	Total depth 35'
	Date	

Sample No.	Depth in feet	Blows per 6 inches	Pen No.	Description	SPT Jar	Comments on nature of boring	Monitoring	
							HYU	LEL
C1 SAMPLE COMPOSITE 0'-4' LABEL 5091311D-C1	0'-4'		70	0'-4.0' ONE- INCH OF NEAR SURFACE VEGETATION AND TOP SOIL FOLLOWED BY 10YR G/S BROWNISH YELLOW AND 5YR 5/8 YELLOWISH BROWN MOIST SANDY SILT WITH LIMESTONE DOLOMITE AND CHERT FRAGMENTS	0.8	VERY HARD DRILLING FROM 0'-4'. NO SAMPLE FROM 4'-5' DUE TO HARD DRILLING	20 IN AUGER @ 4'	
C2 SAMPLE COMPOSITE 5'-10' LABEL	5'-10'		60	5YR 5/8 YELLOWISH- RED DRY TO MOIST SILT WITH SOME MINOR CLAY AND DOLOMITE, LIMESTONE AND CHERT FRAGMENTS	0.4	VERY HARD DRILLING	30 IN AUGER @ 10'	
C3 Sample 10'-15' composite LABEL 5091311D-C3	10'-15'		20	SAME AS ABOVE	0.2	VERY HARD DRILLING	0.4 IN AUGER	
NO SAMPLE	15'-28.5'		25%	?????? NO SAMPLE FALL BACK MATERIAL IN		VERY HARD DRILLING THROUGH ALMOST ALL ROCK	0.2	

FIELD BORING LOG

Project No. 30600 Project Name ANAD RIFES Boring No. 91311D
 Contractor JEG Driller ATEC Date Started 2-1-92 Completed 2-4-92
 Material HSA Core Size 7 3/4" Bore 1.75" (0.7) Product Label D
 Ground Wt Soil drilled Below grad 25' Total depth 35'
 Logged by DAI Coded Data

Sample No.	Depth in feet	Blows per 6 inches	Pen Test	Description	SPT Jar	Comments on nature of boring	Monitoring	
							SPT	LL
C4 Composite Sample 22.5'-25'	22.5'-25'		100	22.5'-23' 7.54R 5/8 STRONG BROWN MOIST SILT WITH SOME CLAY AND DOLOMITE, LIMESTONE, AND CHERT FRAGMENTS.	0-1	VERY HARD DRILLING THROUGH ROCKS	0.2 IN HOLE @ 25'	
				23'-25' 7.54R 5/8 STRONG BROWN MOIST CLAY WITH SOME SILT AND DOLOMITE, LIMESTONE + CHERT ANGULAR FRAGMENTS AND COBBLES.				
C5 Sample 25'-26'			100	SAME AS ABOVE	0-1	VERY HARD DRILLING 26'-32.5' NO SAMPLE 26'-32.5'	0.2 IN HOLE @ 26'	
NO SAMPLE	26'-32.5'		0/1	7.7 7.7 7.7 NO SAMPLE		VERY HARD Drilling		
C6 Sample 32.5'-35'	32.5'-35'		100	7.54R 6/8 Reddish Yellow moist to wet clayey silt WITH SOME FINE SAND AND ABUNDANT ANGULAR FRAGMENTS, COBBLES AND Pebbles of CHERT, Dolomite, AND LIMESTONE	0-2	Very Hard Drilling to 32.5'	0.2 IN HOLE @ 35'	

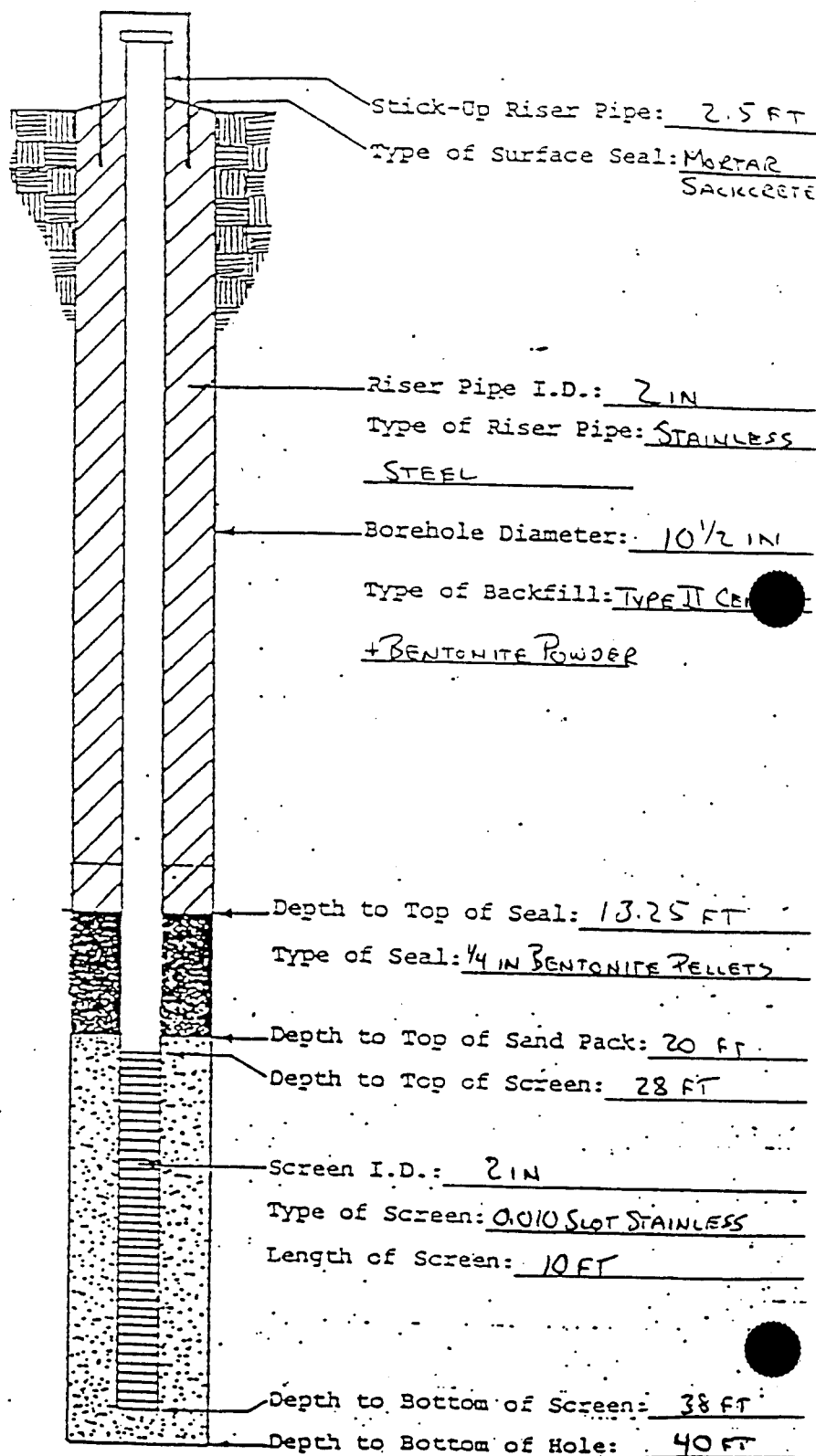
WATER
▽ 25'

Project Name ANAD ESI
Project Number 35G30600
Location SUMU 10/11
Boring No. 91811
Date 2/5/92

Driller ATEC / RICHARD
Drilling Method HSA 10 1/2 IN BIT
Development Method

Well Materials Used

Feet of 5-foot Riser
Feet of 10-foot Riser 30
Feet of Screen 10
Caps 2
Bags of Sand 12
Bags of Bentonite Powder 1/2
Buckets of Pellets 3 1/2
Bags of Cement 6
Bags of Concrete Mix
Pile Covers



FIELD BORING LOG

Survey No. 91B12A

Project No. 35630600

Project Name ANAD ESI

Page 1 of 5

Contractor ATEL

Driller JEFF

Date Bored 1/10/92

Completed

Method HSA 7 1/2 IN

Casing Size

HYD 1.7/10.2

Pressure Level

Ground at

Soil drilled

Σ Below grad

Total depth

Logged by BHK

Checked by

Date 1/10/92

Sample No.	Depth in feet	Blows per foot	Pen Test	Description	HYD Jar	Comments on nature of boring	Monitoring	
							HQU	LEL
5091B12 -1	0-1.5		100	gravelly silt and sand, yellowish brown 12YR 5/4		0955 Commercial	1.0	
	1.5-2.5			gradational change to sandy, gravelly silt, reddish yellow 7.5YR 6/8, dry some streaks of bright red				
	2.5-5		80	as above, moist at bottom of interval			1.0	
5091B12 -2	5-7.5		80	as above with occasional chert fragments and siltings in bottom 1'				
	7.5-10		10	large rocks blocked, sample material sampled as above				
	10-12.5		80	as above		Hard drilling 10-11'		

FIELD BORING LOG

Project No. 55630600	Project Name ANAD ESI	Boring ID 91812A
Contractor ATEL	Driller JEFF	Date 1/10/92
Well ID HSA 7 1/2 IN	Casing ID	HYD 11.7/10.3
Ground W	Soil drilled	Σ Below grad
Log by BUK	Check by	Date 1/10/92

Sample No.	Depth in feet	Blows per foot	Pen Test	Description	HYD jar	Comments or Notes	Monitoring	
							HYD	LEL
5091812-3	12.5-15			sandy, gravelly silt, yellowish red, 5 1/2 R 5/8, dry mixed with angular chert shards		Hard drilling through most of section	1.0	
5091812-4	15-20	60		sandy, clayey silt and rock fragments strong brown 7.5 1/2 R 5/8 dry		Hard drilling entire run no in situ or geotech sample obtainable	1.0	
5091812-5	20-25	60		as above slight increase in clay toward base of interval		Hard drilling entire run last 1 ft in situ	2.1	
	25-30			as above with less clay				

FIELD BORING LOG

Project No. 35G30600	Project Name ANAD ESI	Boring No. 91812
Contractor ATEL	Driller JEFF	3 & 5
Method HSA 7 1/2 IN	Casing Size	11/10/92
Ground at	Soil drilled	HYD 117/102
Logged by BHK	City	Progress level
		Total depth
		Date 1/11/92

Sample No.	Depth in feet	Blows per foot	Pen. Test	Description	HYD Jar	Comments on nature of boring	Monitoring	
							HYD	LEL
	30-32.5		50	Interval missing		soft drilling 32-33 ft	6.6	JK
S091B12 -6	32.5-33			sandy clay, reddish yellow 7.5 YR 6/8, wet, soft, occasional gravel < 5%, waxy odor		Chem sample only, no geo tech	6.6	
	33-35			sandy gravelly clay, yellowish red, 5YR 5/8, plastic, slightly moist, stiff, ~15-20% gravel 10% coarse sand			2.2	
	35-38		90%	sandy, Pebbly clay, yellowish red, 5YR 5/8, large quartz, dolomite, and chert pebbles ~30% 10% sand, moist, plastic		Hard drilling at 38' drilled bitline to 40'	6.0	
						TD'd hole at 43' - rocky all the way through 5' overdrill 1010		
						Dry hole Continued drilling 1415		

FIELD BORING LOG

Project No. 35630600	Project Name ANAD ESI	Serial no. 91B12
Contractor ATEL	Driller JEFF	Page 4 of 5
Method HSA 7 1/2 IN	Casing size	Completed
Ground at	Soil drilled	HYD 11.7/10.2
Logged by BDK	Q'd by	Projected level
	Date 1/11/92	Total depth

Sample No.	Depth in feet	Blows per 6 inches	Pen Test	Description	HYD Jar	Comments on nature of boring	Monitoring	
							HYD	LEL
	40-43			Rock with intermittent soft spots		no sampler used on overdrill		
	43-45		100	sandy, gravelly clay, yellowish red 54R 5/8, ~20% gravel, 5-10% sand very moist to wet			3.8	
	45-50		50	as above, occasional large cobbles and pebbles.			2.2	
	50-55		60	as above		Hand drilling at 51 ft drilled bit to 57'	28	
	55-57			as above		Hand drilling at 57 ft pulled and opened sampler 1700	3.2	

FIELD BORING LOG

Project No. 35G30600	Project Name ANADESI	Boring No. 91812
Contractor ATE	Driller JEFF	Page 5 of 5
Method HSA 7 1/2 IN	Casing Size	Drilled 1/10/92
Ground at	Soil drilled	Completed
Logged by BHK	Cut by	HYD 127/102
		Progress level
		Total depth
		Date 1/12/92

Sample No.	Depth in feet	Blows per 6 inches	Pen Test	Description	HYD Jar	Comments on nature of boring	Monitoring	
							HYD	LEL
	58-59.5			sandy, gravelly clay, as above		0755 Measured water level to 51.75 ft below ground surface in augers		
	59.5-60			gravel, angular, very little clay, 5-8% ~10% very coarse angular sand, white chert and gray dolomite		Drilled out rock 57-58 ft and reinserted sampler 0820		
	60-61			gravelly clay reddish yellow 5426 ft, ~50% gravel, 10-15% coarse sand, wet		Overdrill for well to 63 ft 0900 10 1/2 in bit Replaced bit @ 52.5 ft - teeth worn 1315-1345 Reinstalled augers to 52.5 1345-1545 Shaft broke at wellbore replaced shaft and drive cap broke - cant get dex out of shaft. 1605 1/14/92 Tied new drive cap & shaft - cap broke move to 91811 site		

Project Name SNAD - TASK #6

Project Number 35G30600

Location _____

Ring No. 91B12

Date 01/25/92

Driller ATEZ

Drilling

Method HSA

Development

Method _____

Well Materials Used

Feet of 5-foot Riser 5 ft

Feet of 10-foot Riser 40 ft

Feet of Screen 10 ft

Caps bottom plug; top cap.

Bags of Sand 9

Bags of Bentonite Powder 32 lb

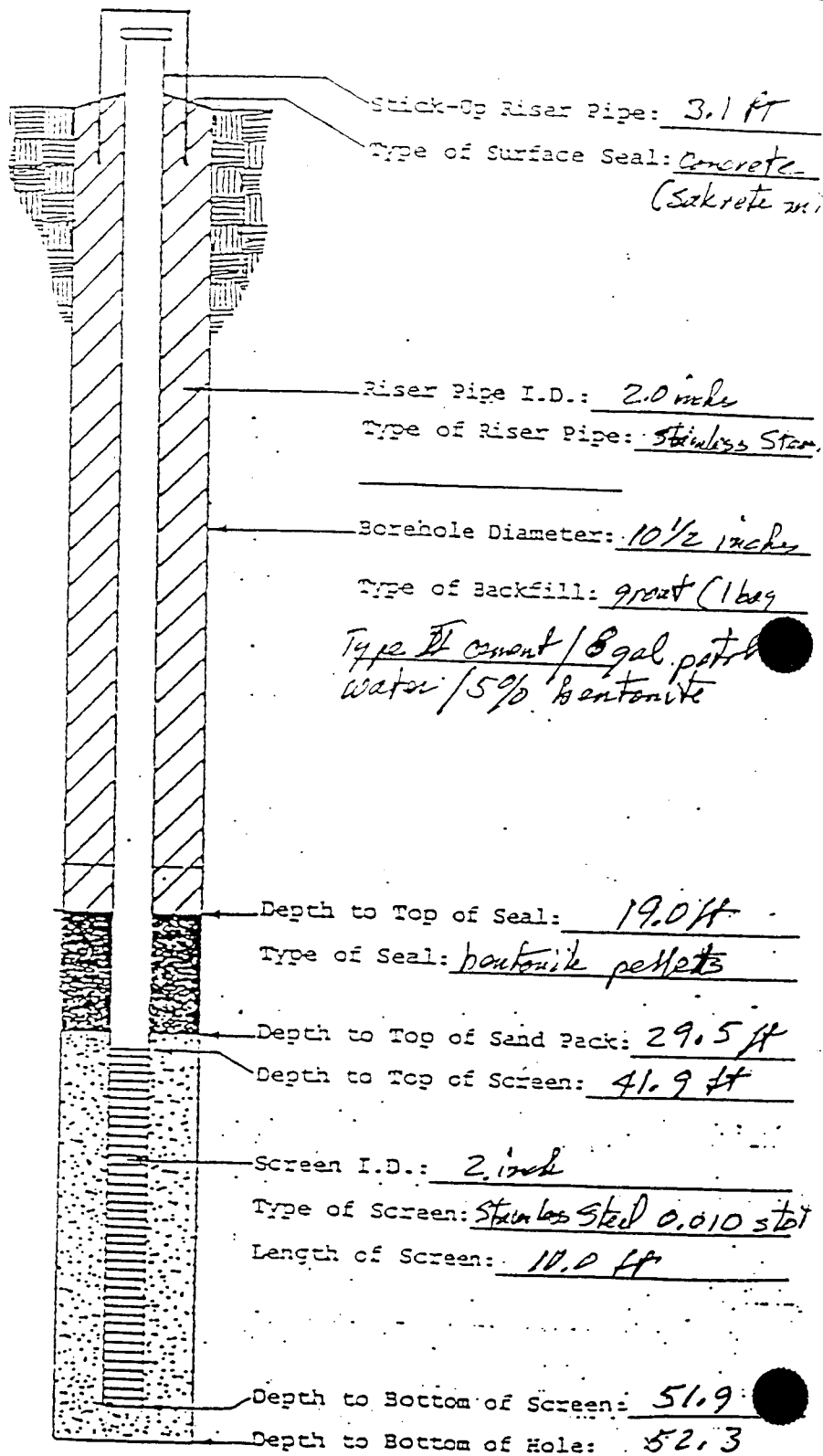
Buckets of Pellets 3

Bags of Cement 7

Bags of Concrete Mix _____

Hole Covers 1 3 inch dia protective

casing with locking cover



FIELD BORING LOG

Project No. 35G30000	Project Name ANAD ESI	Boring No. 91B13
Contractor ATEC	Driller JEFF	Date 2/8/92
Method HSA 7 1/2 IN	Casing size	HYU 1.7/10.3 N/A
Ground at	Soil drilled	Below grad
Logged by BHK	Ch'd by	Date

Sample No.	Depth in feet	Blows per 6 inches	Pen. Kcs	Description	HYU Jar	Comments on nature of boring	Monitoring	
							HYU	LEL
	0-1		100	silt, mottled dark reddish brown 2.5YR5/6 and light reddish brown 2.5YR6/5 occasional sub rounded gravel <5%, moist		1245 Commenced drilling		
	1-2.5		100	silty, sandy clay reddish yellow 7.5YR6/6, occasional gravel <5%, gravel increases to ~25% at base of sample, wet to dry near 2.5 ft		Hand drilling 3.5 - 5 ft in cobbles and gravel, drilled blind		
	2.5-5			ground sample mixed clay sand & gravel mixed red & yellow the dry to slightly moist		Hand drilling 5-6.5 ft, pulled sampler and drilled blind		

FIELD BORING LOG

Project No. 35630606	Project Name ANAD ESI	Boring ID 91B13
Contractor ATEC	Driller JEFF	No. 2 of 3
Location HSA 7 1/2 IN	Client US	Completed
Ground W	Soil tested	EMU 117/100 N/A
Logged by BHK	City	Monitoring Level D
	Date 2/8/92	Total depth

Sample No.	Depth in feet	Blows per 6 inches	Pen Rate	Description	EMU Jar	Comments on location of boring	Monitoring	
							HEU	LEL
	5-8			Mixed material as above occasional ground ironstone		Hand drilling 6.5 to 8 feet Drilled blind		
	8-10		100	sandy, silty clay, strong brown 7.5 YR 4/6, mottled w/ yellow 10 YR 8/6 occasional gravel 5-10% slightly moist				
	10-15		100	as above		Hand drilling 13-14 feet		
						2/9/92 0730		
						Hand drilling 15-16 ft. then very soft		
						Water coming out of hole as augers hit 20 ft		
	15-16.5		80	clayey gravel reddish yellow 7.5 YR 7/6, soft, saturated				

FIELD BORING LOG

Project No. 38630600	Project Name ANAD ESI	Boring No. 91313
Contractor ATEC	Driller JEFF	Page 3 of 4
Station HSA 7 1/2 W	Casing Size 8" ID	Drilled 2/8/92
Ground el.	Soil drilled	Completed
Logged by BJK	Checked by	Project Level D
		Below grade
		Total depth
		Date 2/9/92

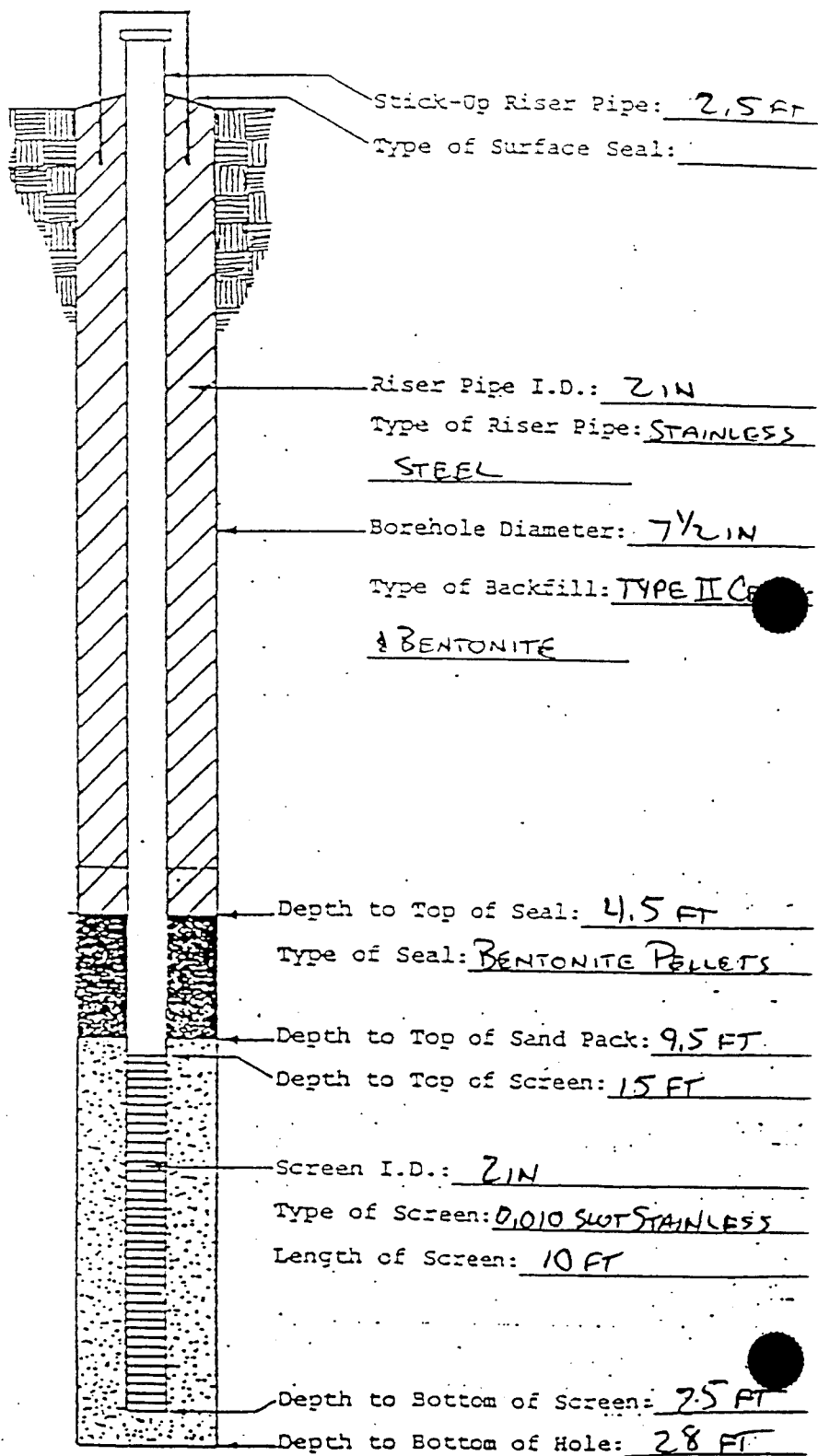
Sample No.	Depth in feet	Blows per 6 inches	Penetration No.	Description	SPT	Comments or Remarks	Monitoring	
							SPT	LL
	16.5-18.5			medium, gravelly clay, reddish yellow 7.5 YR 7/6 mottled with strong brown 7.5 YR 5/8, plastic, wet, 20% sand 5-10% gravel				
	18.5-20			gravelly clay, brownish yellow 10 YR 6/8, plastic moist to slightly moist at base of interval mottled ~30% gravel very little fine sand				
	20-23			interbedded gravelly clay, as above and clayey retained gravel chert and dolomite predominant				
	23-25			silty clay yellowish brown 10 YR 5/6, stiff, plastic, trace gravel 45% and sand, slightly moist				
	25-28			as above		TD @ 28' 0920		

Project Name ANAD ESI
Project Number 35630600
Location SWMU 14 TNT LAUNDRY
Boring No. 91813
Date 2/19/97

Driller ATEC/JEFF
Drilling Method HSA 7 1/2 IN BIT
Development Method _____

Well Materials Used

Feet of 5-foot Riser 7.5
Feet of 10-foot Riser 10
Feet of Screen 10
Caps 2
Bags of Sand 3
Bags of Bentonite Powder _____
Buckets of Pellets 1 1/4
Bags of Cement _____
Bags of Concrete Mix _____
Mole Covers 1



91B14 / SWMU #15

FIELD BORING LOG ANAD TASK #6 SWMU #15						Boring No. 91B14	
Project No. 3SG30600		Project Name ANAD TASK #6		Page 1 of 1			
Contractor JACOBS		Driller ATEC - Jmm	Date started 20 FEB 92	Completed 20 FEB 92			
Method Hollow Stem 3/4" ID		Casing 1100 Stainless Steel 2" ID	BMU 117/102	Process level Mod "0"			
Ground at UNKN		Soil drilled SFC-18'	Σ Below grad 2'	Total depth 18'			
Logged by BRC		Ch'd by	Date				
Sample No.	Depth in feet	Blows per 6 inches	% Rec Pen Rec	Description	BMU Jar	Comments on nature of boring	Monitoring Rec in Auger BMU
91B141C	0-5'	—	100%	CLAY/GRAVEL-10YR 5/8" w/born, w/grand chert, sand & z, angular, unconsolidated, poor sorting, fragmented clast, 1mm-50mm (pebbles), moist from 0-2' and wet @ 2' below SFC, clasts are 20-50% clay, is v. soft, to runny.	Ø	1000, No PROBLEMS collected Soil boring sample # 91B141C and duplicate for Nitrite, Nitrate, TPH and Mason Jar Lithologic sample of soil from 5' water Table is @ 2' below SFC	5' Rec
91B142C	5-10'	—	20%	AS ABOVE Wet V. Runny mud	Ø	1030, No PROBLEMS collected Soil boring sample # 91B142C Nitrite, Nitrate	1' Rec Bottom of barrel
91B143C	10-15'	—	30%	AS ABOVE Wet V. Runny mud	Ø	1100, No PROBLEMS collected Soil boring sample # 91B143C Nitrite, Nitrate	2' Rec
	15-18' TO	—	Ø	WET No Recovery	Ø	1130 No Recovery to wet to Recover any soil	Ø' Rec
<p>END OF DRILLING Set well TO 18' # 91B14</p>							

91B15 / SUMMIT #15

FIELD BORING LOG		SUMMIT #15		DATE 18 FEB 92	
PROJECT NO. 356306-00		PROJECT NAME ANAD TASK #6		DATE 18 FEB 92	
CONTRACTOR Jacobs		DRILLER ATEC - JIM		COMPLETED 19 FEB 92	
MATERIAL 3/4" ID		Casing 1/2" ID		PROJECT LEVEL Mod "0"	
Casing 1/2" ID		Soil drilled SEC - 20'		Total depth 20' Below Sfc (USD)	
Casing 1/2" ID		Casing 1/2" ID		Data	

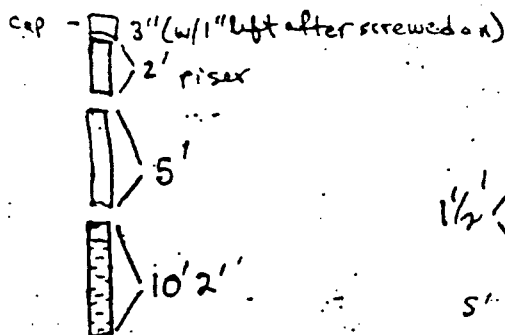
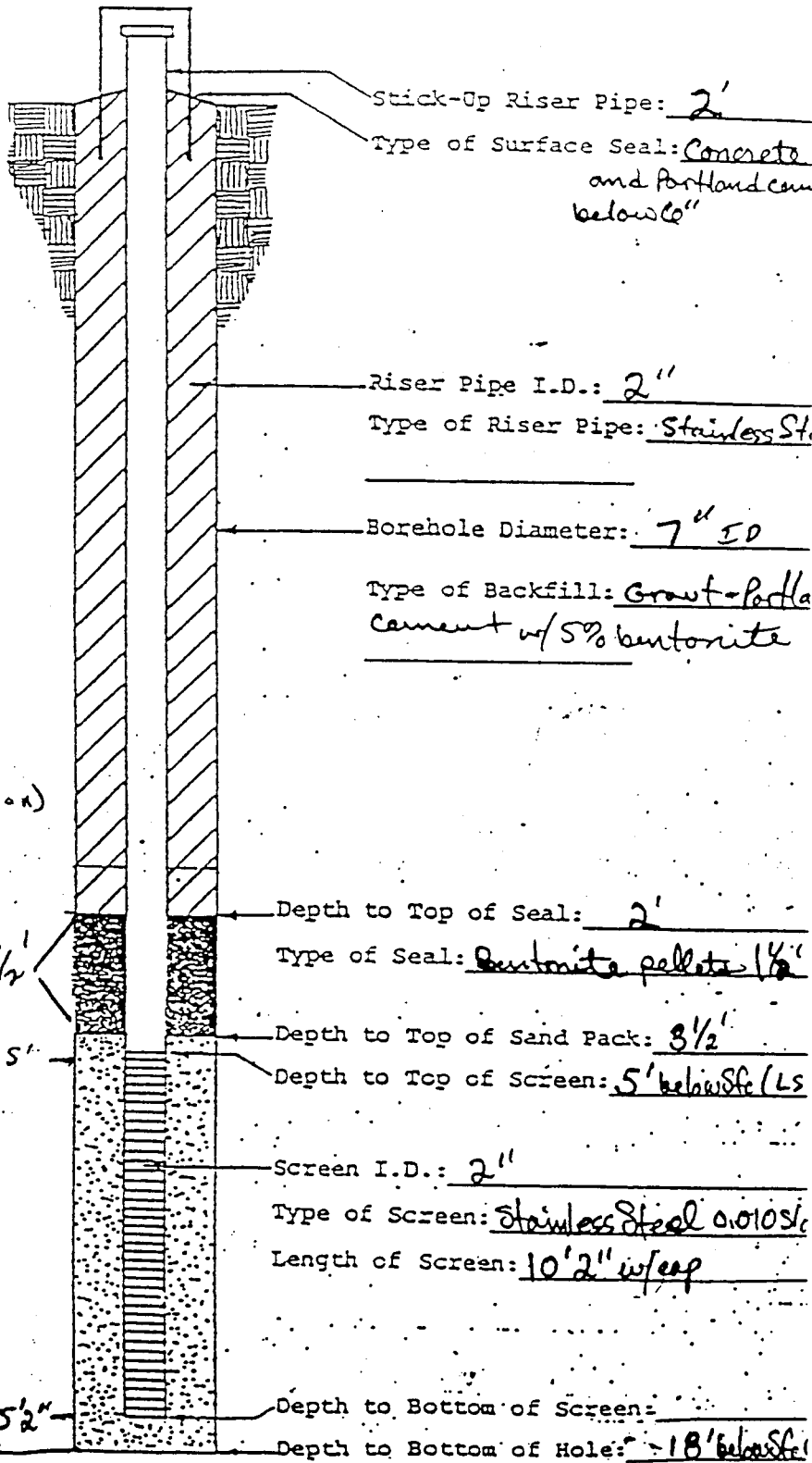
Sample No.	Depth in feet	N/A	% Rec	Description	OVA	NOTES	Monitored Rec in Auger
591B151C (5')	0-5'	—	40%	Gravel/Clay - 104R < 1/8 1/2-brn, w/ gravel chert, sand ~50% soft, unconsolidated, poor sorting, 1mm to 30mm to cobbles angular, moist	1280	NO PROBLEMS - (possibly pushing rock down w/ auger - thus v. little recovery) collected Soil Sample 591B151C - Nitrite/Nitrate 250 ml Amber - Mason Jar Sample	2 1/2' Rec
591B152C (10')	5-10' SFC 5-9'	— ▽ 9'	20%	CLAY, u. dk gry, 104R < 1/8 3/1, wet ~20-30% chert/sand Qtz < 1-40 mm, angular, unconsolidated, pebbles, cobbles - soft	1240	No Problems - sample 591B152C Nitrite, Nitrate, TPH @ 9', 250 ml Amber	1 1/2' Rec
18 FEB 92	10'-19'	—	65%	CLAY/Gravel - 104R < 1/8 5/8 wet, soft ~50% chert/sand Qtz angular, unconsolidated, limestone/chert frags, pebbles wet	—	NO PROBLEMS -	3' Rec
19 FEB 92	19-20'	—	100%	AS ABOVE TO 20' LSD	< 1	NO PROBLEMS Drilled out sluff from ~17'-19' and drilled new hole 19-20' TO Wt standing in hole	1' Rec
				END OF DRILLING	@ begin of drilling @ 4'8" below Sfc. New level after drilling is @ 9' Below Sfc.		

Project Name ANAD TASK #6
 Project Number BSG306-00/302
 Location SWMU #15
 Spring No. 591814
 Date 20 FEB 92

91614 / SWMU #15
 Driller ATEC - Jim Plauski
 Drilling Method Hollow Stem Auger 3 1/4" ID
 Development Method

Well Materials Used

Feet of 2-Foot Riser 2'
 Feet of 5-foot Riser 5' 2"
 Feet of 10-foot Riser
 Feet of Screen 10' 2"
 Caps 2 caps
 Bags of Sand 3 bag (200 lbs)
 Bags of Bentonite Powder 2 portland
 Buckets of Pellets 3/4 of 1 bucket
 Bags of Cement 2
 Bags of Concrete Mix 15
 Hole Covers



TO 18'

FIELD BORING LOG

56°F FAIR

Boring no. 91B16

Project no. 35630600

Project name ANAD / ESI

Page 1 of 2

Contractor JEG

Driller ATEC

Started 2-16-92

Completed 2-16-92

Method H&A

Casing size

HYU 1.75" (1.75)

Project level D

Ground at

Soil drilled

Σ Below grad 23'

Total depth 30'

Logged by DAI

Checked by

Date

Sample No.	Depth in feet	Blows per 6 inches	Pen Test	Description	HYU Jar	Comments on behavior of boring	Monitoring	
							HYU	LEL
Chemical Sample 91B161C 0.25'-0.5'	0'-3.5'		8090	0'-0.25' - 7.5 YR 4/6 STRONG BROWN WET SANDY SILT W/ SOME CLAY AND COARSE MEDIUM AND FINE DOLOMITE, LIMESTONE AND CHERT GRAVEL. SOME ORGANIC MATTER	0.0	VERY HARD DRILLING NO SAMPLE FROM 3.5'-5.0' HNU 0.1 OVER LENGTH OF CORE	0.0 IN OPEN HOLE @ 5'	
				0.25'-0.5' BLACK ASH-LIKE MATERIAL				
				0.5'-3.5' 7.5 YR 5/8 STRONG BROWN WET SANDY SILT W/ SOME CLAY AND COARSE MEDIUM AND FINE DOLOMITE, LIMEST. AND CHERT GRAVEL. 1" SAND LAYER @ 1'				
Chemical Sample 91-101 91B162C	8'-10'		10090	8'-10' - MOTTLED 6/8 YELLOWISH BROWNISH-YELLOW AND 2.5 YR 4/8 RED MOTTLED CLAY W/ SOME SILT. Dolom. Limest. + chert GRAVEL OF ALL SIZES AND BLACK IRON OXIDES	0.0	Very hard Drilling 5'-8' - NO SAMPLE 5'-8' HNU 0.1 OVER LENGTH OF CORE	0.1 IN AUGERS @ 10'	

FIELD BORING LOG

Project No. 356-30600	Project Name ANAD 1 EST	Boring No. 91B16
Contractor JEG	Driller ATEC	2.16.91
Material HSA	Casing Size 11.75" (11.75)	Completed 2.16.91
Cased at	Soil drilled	Below grad 23'
Logged by DAI	Ch'd by	Date
		Total depth 30'

Sample No.	Depth (feet)	Blows per 6 inches	Pen Rod	Description	SPT Blows	Comments on Nature of Boring	Monitoring	
							HRTU	LEL
Chemical Sample 14'-15' 91B163C	10'-15'		100	10'-15' SAME AS ABOVE	0.1	NO PROBLEMS ADVANCING BORING AND 0.1 OVER CORE	0.1 IN AUGUST @ 15'	
Chemical Sample 17'-18' 91B164C	15'-18'		100	15'-18' - SAME AS ABOVE, HOWEVER, 6" WET GRAVELLY ZONE FROM 17'-17.5'	0.0	VERY HARD DRILLING - NO SAMPLE 18'-20' + 0.1 IN OVER CORE	0.1 IN NOV 1991 @ 20'	
Chemical Sample 23'-24' 91B165C + EQUIPMENT RINSE 91B165L	21'-21.5' AND 22'-24'		100	5 HR 5/8 Yellowish Red moist to wet silt w/ some minor clay and coarse medium and fine dolomite gravel + medium sand	0.1	VERY HARD DRILLING. SAMPLE ONLY FROM 21'-21.5' AND 22'-24' HNA 0.1 OVER LENGTH OF CORE		
NO SAMPLE	→ NO SAMPLE		IN	?? ?? CORE BARREL	-	VERY EASY DRILLING 25'-30'	-	

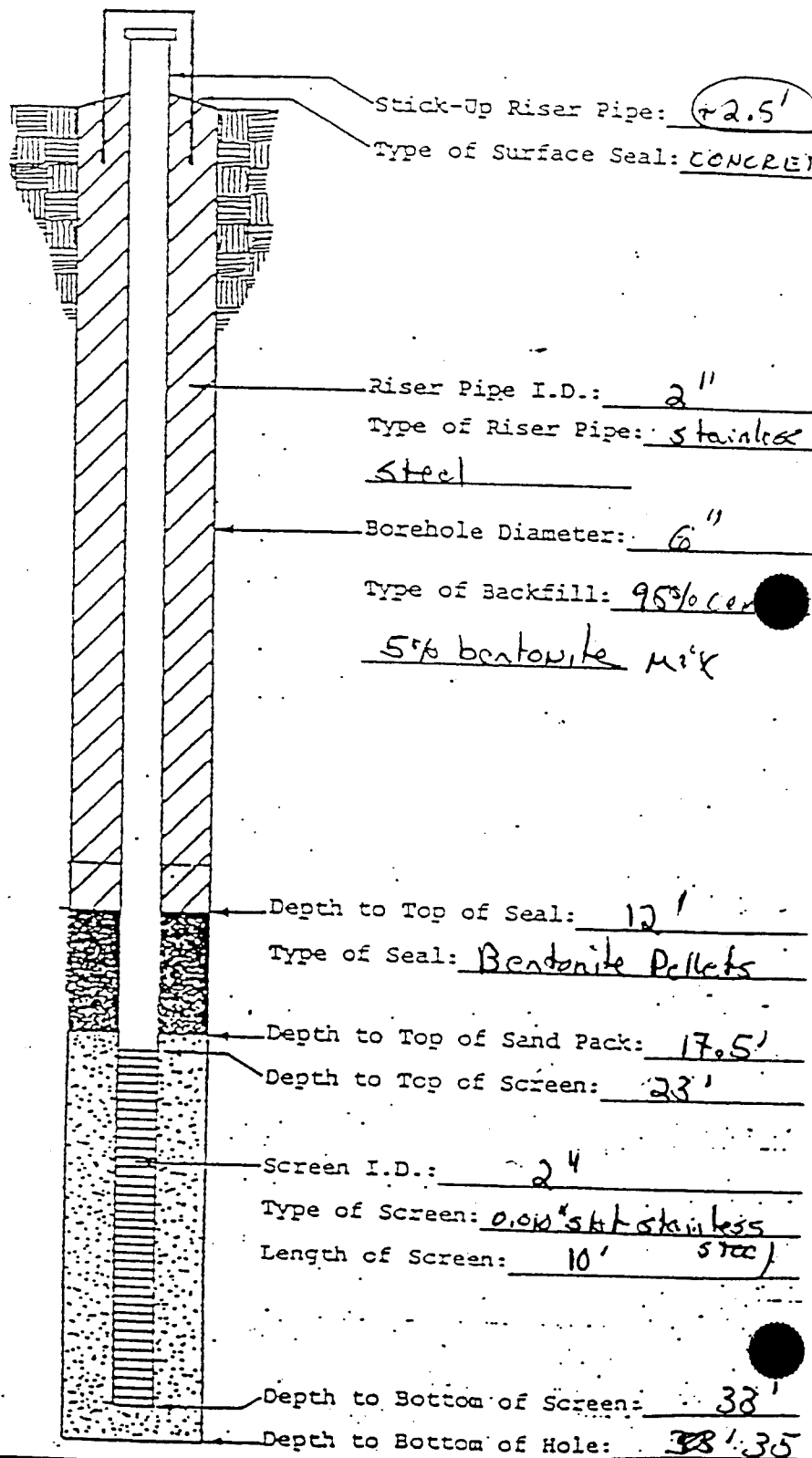
91B16

Project Name ANAD / ESI
 Project Number 35630600
 Location SWMU #16
 Boring No. 91B16
 Date 2/17/92

Driller ATEC
 Drilling Method Hollow Stem Auger
 Development Method _____

Well Materials Used

Feet of 5-foot Riser 5
 Feet of 10-foot Riser 20
 Feet of Screen 10
 Caps (2) 1 bottom, 1 top
 Bags of Sand 8
 Bags of Bentonite Powder 7/10
 Buckets of Pellets 2 3/4
 Bags of Cement 7
 Bags of Concrete Mix 15
 Hole Covers _____



FIELD BORING LOG 91B17				Boring No.				
Project No. 35630600	Project Name ANAD Task #6		Page 1 of 2					
Contractor ATEL	Driller R. Bonner	Drill used	Completed					
Method HSA	Casing size	HYU 1.7/10.2	Progress Level					
Ground at	Soil drilled	Σ Below grad	Total depth 25.5 ft					
Logged by R.A. Gardner	Ch'd by	Date 02/16/92						
Sample No.	Depth in feet	Blows per 6 inches	Pen Recd	Description	HYU Jar	Comments or Nature of boring	Monitoring	
							HYU	LLL
91B17- Φ 2.5 ft LSD	Φ 2.5			yellowish brown very sandy clay (10YR 5/4) with 1/4 in to 1 in diameter rock fragments No SAMPLE	Φ	Drilled easily to 5.5 ft Drilled without risk 3.5 to 5.5 ft. Recovered 2.2 ft sample. Standing water in borehole at 3.9 ft LSD U&B survey results: borehole clean		
5091B1710 Φ 7.5 ft 91B17- 5.5 ft 7.5 ft LSD	5.5 to 7.5			Same as Φ to 2.5 ft interval	Φ	Light drill chatter Recovered 3.6 ft sample 7.5 to 10.5 ft interval is weathered rock in place, therefore did not move vis and run U&B survey; this procedure OK by Genl Bragdon, COE.		
5091B172 Φ 10.5 ft 91B17- 7.5 to 10.5 ft LSD	7.5 to 10.5			weathered brownish yellow (10YR 6/6), yellow (2.5Y 8/6), and red (2.5Y 4/6) stiff, sandy clay with 0.25 ft quantity at 7.5 to 7.75 ft				
91B17- 10.5 ft 14.6	10.5 to 14.6			Same as 7.5 to 10.5 ft interval, plastic	Φ	Drilled 10.5 to 15.5 ft easily Recovered 5.0 ft sample		
91B17- 14.6 to 15.0 ft LSD	14.6 to 15.0			broken, weathered, light gray (N 7) dolomite, dolomite fragments, saturated		Also major jar sample was collected for 15.0 to 15.5 ft interval (not enough sample)		
5091B173 15.0 ft 15.5	15.0 to 15.5			Same as 7.5 to 10.5 ft interval, saturated		Water level = 8 ft LSD		

FIELD BORING LOG

91B17

Project No. 35630600	Project Name ANHD Task #6	Boring No.
Contractor ATEZ	Driller R. Brooman	Page 2 of 2
Method HSA	Casing Size	Completed
Ground at	Soil drilled	Project Level
Logged by R. A. Harkins	City	Total depth 25.5 ft
	Date 02/16/92	

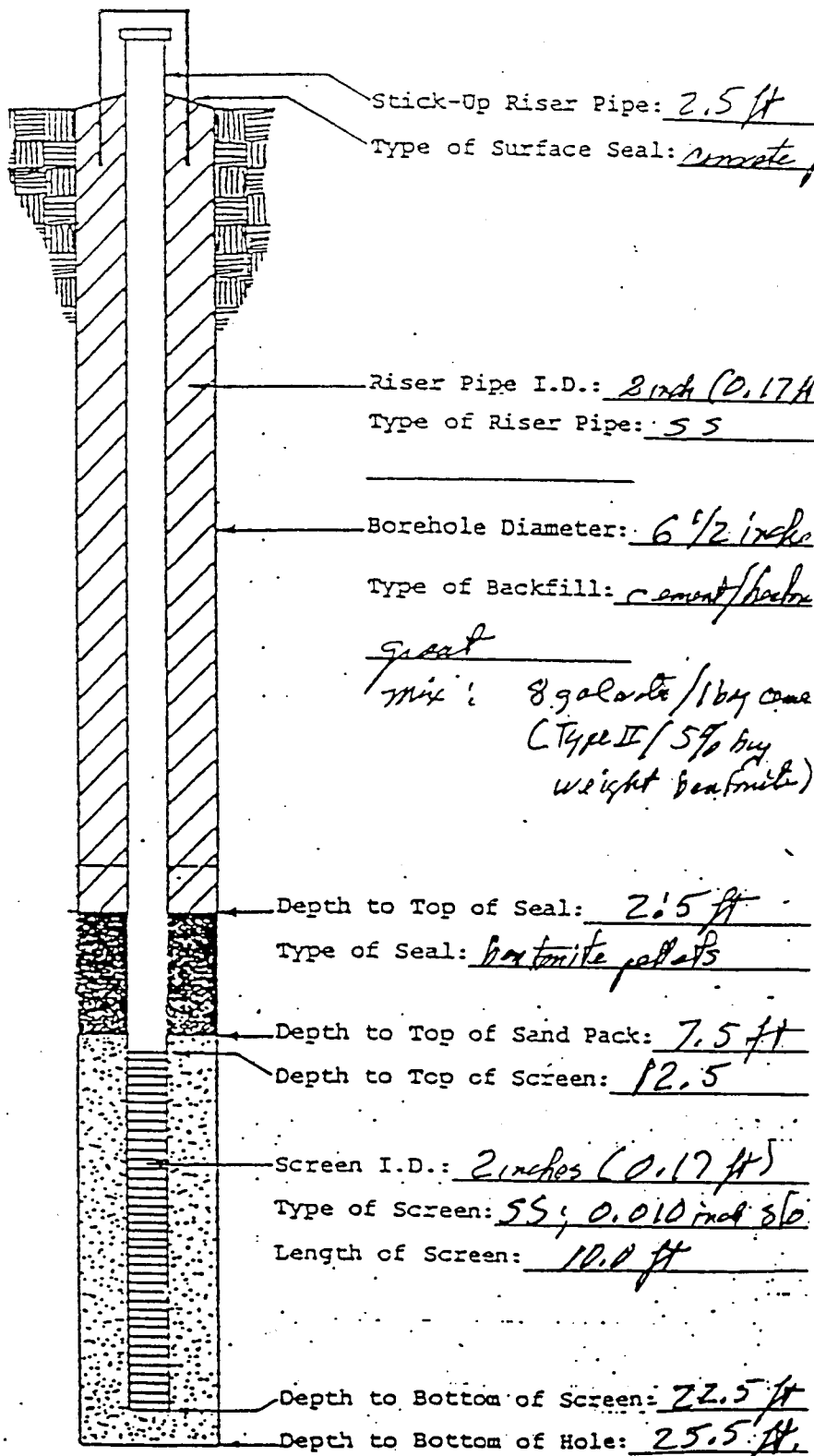
Sample No.	Depth in feet	Blows per 6 inches	Pen Log	Description	HYD Jar	Comments on nature of boring	Monitoring	
							HYD	LEL
91B17-15.5 ft	15.5 ft			Brownish yellow (10YR 6/6) clay	Φ	Drilled 15.5 to 20.5 ft easily		
15.5 ft	20.5 ft			Sandy clay with angular dolomite fragments 1/8 inch to 3/4 inch diameter		Record 0.5 ft sample		
20.5 ft						Water level - 8 ft LSL		
LSD								
	15.5 ft							
	20.5 ft							
	25.5 ft							
	TD = 25.5 ft			No SAMPLE		Drilled easily, no effort.		

Project Name ANAD TASE # 6
Project Number 35630600
Location _____
Boring No. 91817
Date 02/16/92

Driller ATEL; Richard Boman
Drilling Method HSA
Development Method Pump

Well Materials Used

Feet of 5-foot Riser 5 SS
Feet of 10-foot Riser 10 SS
Feet of Screen 10 SS
Caps bottom, top SS
Bags of Sand 3
Bags of Bentonite Powder 9 1/6
Buckets of Pellets 2 @ 50 lb each
Bags of Cement 2 @ 94 lb
Bags of Concrete Mix _____
Le Covers 5 ft x 3 inch steel
ringed, leaded perforated
lining



FIELD BORING LOG

55° F Overcast

Boring no 91B18

Project no. 35G30640

Project name ANAD ESI / TASK 6

Page 1 of 2

Contractor JEG

Driller ATEC

Date started 2.18.92

Completed 2.18.92

Method HSA

Casing size 2"

ENT 117/102

Project level 0

Ground el.

Soil drilled

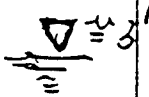
Below grad 3' 3'

Total depth 18'

Logged by DAI

Ch'd by

Date

Sample No.	Depth in feet	Blows per 6 inches	Pen Test	Description	ENT Jar	Comments on nature of boring	Monitoring	
							ENT	LEL
91B181C 4'-5'	0'-5'		50%	0'-3' 7.5YR 4/4 brown - dark brown moist sandy silt w/ coarse med. and fine chert and dolomite gravel	—	NO PROBLEMS ADVANCING BORING HNL 0.0 OVER LENGTH OF CORE	0.2 IN AUGERS 5'	
				3'-4' 7.5YR 6/8 Reddish yellow wet silt w/ some clay and coarse medium fine dolomite limestone + chert gravel and fine sand				
				4'-5' 2.5Y 5/3 light olive brown wet clay with some silt and coarse medium and fine dolomite limestone and chert gravel, sand and some organic matter				
91B182C 9'-10' 5'-10'	5'-10'		50%	5'-7.5' same as above		NO PROBLEMS ADVANCING BORING HNL 0.0 OVER LENGTH OF CORE	0.2 IN AUGERS 10'	
				7.5'-10' 10YR 6/2 light brownish gray wet sandy silt w/ some clay, coarse, medium and fine dolomite, limestone + chert gravel and some red stained chert				

FIELD BORING LOG

Project No. 35630600		Project Name ANAD ESI / TRXK4		Boring No. 91018
Contractor JEG	Driller ATEC	Date started 2.18.92	Completed 2.18.92	
Method HSA	Casing size 10 2"	HYU 11.7/03	Project Level D	
Ground at	Soil drilled	Σ Below grad = 3'	Total depth 18'	
Collected by DAI	Col'd by	Date		

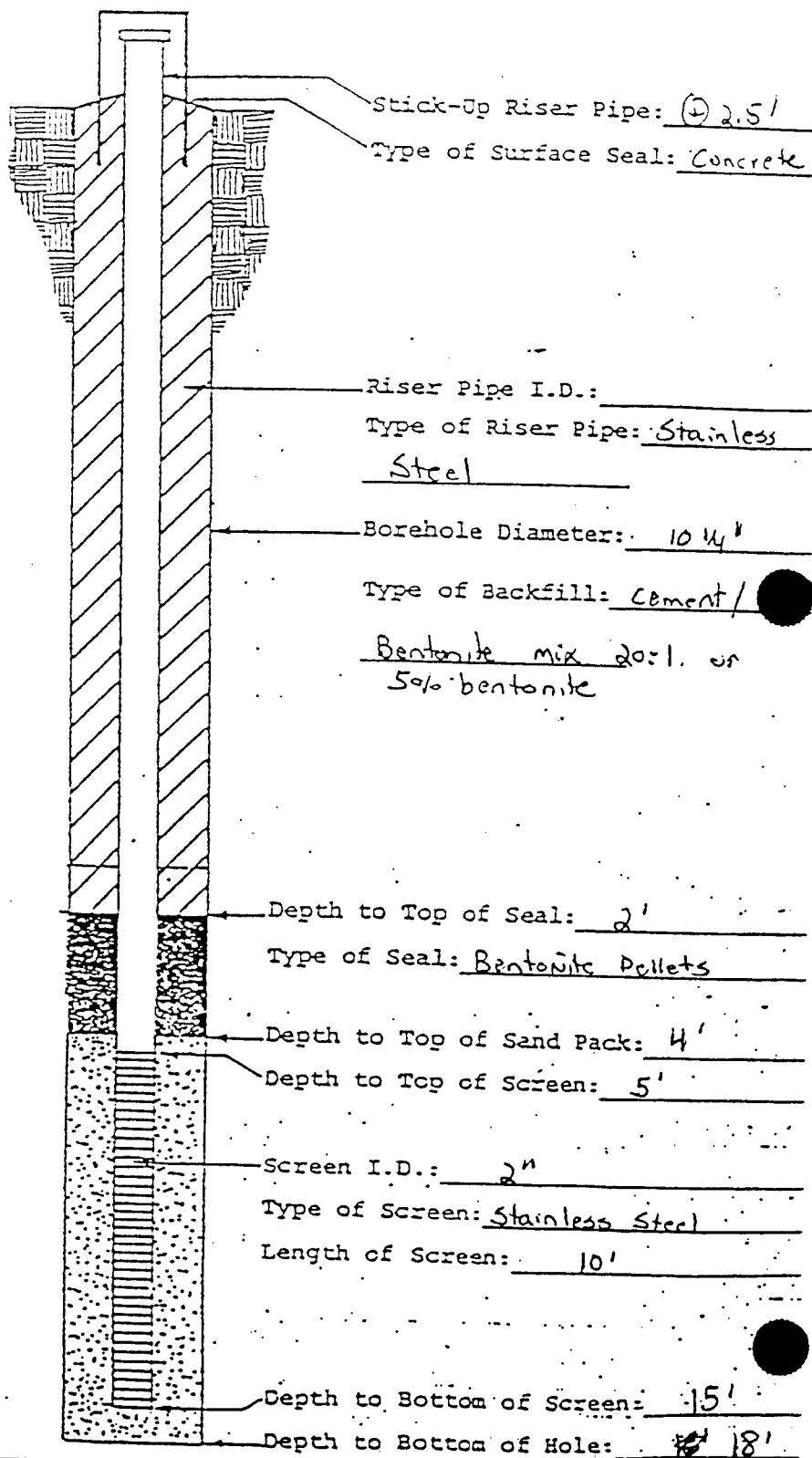
Sample No.	Depth in feet	Blows per 6 inches	Pen Test	Description	HYU Jar	Comments on nature of boring	Monitoring	
							HYU	LEL
910183C 14'-15'			50%	10'-13' SAME AS ABOVE -?-?-?-?-? 10'-14' -?-?-?-?-? 14'-15' - MOTTLED 104R G/S BROWNISH YELLOW AND 104R S/S YELLOWISH BROWN DRY TO MOIST CLAY W/ SOME MEDIUM AND FINE DOLomite, Limestone AND CHERT GRAVEL W/ SOME WHITE + Red MOTTLING TO MATRIX NO SAMPLE RECOVERED		HARD DRILLING 13'-14' NO SAMPLE 13'-14' HNU 0.0 OVER LENGTH OF CORE	0.0 IN Augers @ 15'	
NO SAMPLE	15'-18'					very hard drilling	HNU 0.0 IN Augers @ 18'	

Project Name ANAD EST
Project Number 35G-30600
Location SWMU #17 / Demolition Pit
Boring No. 91818
Date 2-18-92

Driller ATEC
Drilling Method Hollow Stem Auger
Development Method

Well Materials Used

Feet of 2-foot Riser 2'
Feet of 5-foot Riser 5'
Feet of 10-foot Riser 0'
Feet of Screen 10'
Caps 1 end, 1 top
Bags of Sand 4.5
Bags of Bentonite Powder 1
Buckets of Pellets 1
Bags of Cement 2
Bags of Concrete Mix 1.5
Le Covers



FIELD BORING LOG

91B19

Project No. 35730600	Project Name ANCO TANK #6	Boring No.
Contractor ATZ	Driller R. Scott	Page 1 of 1
Location HSA	Casing Size	Completed
Casing ID	HYD 11.7/10.2	Proposed Level
Soil drilled	<input checked="" type="checkbox"/> Below grad	Total depth 23.0 ft
Drilled by R. A. Halden	City	Date 02/14/92

Sample No.	Depth to (ft)	Elev. per 6 inches	Pen. No.	Description	HYD Jar	Comments on location of boring	Monitoring	
							HYD	LP
91B19 - ϕ 5.0 ft ϕ 5.0 ft ft L50				light yellowish brown (2.54 6/8) sandy plastic clay	ϕ	Drilled ϕ to 5.0 ft Densily Recomm. 3.3 ft sample Drilling interrupted at 4.0 ft for URB borehole survey; URB says hole is clear to continue drilling.		
SO910191C \$ 91B19 - 0.8 to 5.0 ft L50	0.8 to 5.0			Very sandy olive (5.7 5/8) saturated clay. Contains roots & wood fragments, rock fragments 1/4 inch to 1 inch diameter		Encountered rock - 2 to 2 1/2 ft L50		
91B19 - 5.0 to 6.5 ft L50	5.0 to 6.5			Same as 0.8 to 5.0 ft interval	ϕ	Recomm. 3.6 ft sample		
SO91B192C \$ 91B19 - 6.5 to 10.0 ft L50	6.5 to 10.0			multifacial brownish yellow (1.042 6/8) and red (2.54 2 1/8) very sandy clay; moderately plastic with angular dolomite fragments 1/4 inch to 1 inch diameter (>20%).				

FIELD BORING LOG

91B19

Project No. 363060	Project Name ANAD TASE #6	Boring No.
Contractor ATEL	Driller R. Scott	Page 2 of
Station HSA	Casing Size	Completed
Cased to	Soil tested	Penetration Level
Log by R.A. Hartman	Cut by	Total Depth 23.0 ft
	Date 02/19/92	

Sample No.	Depth in feet	Blows per 6 inches	Pen. No.	Description	BNU Jar	Comments on surface of boring	Monitoring	
							HRTU	LZ
91B19-10.0 to 12.0 10.0 to 12.0 ft LSD, 509181936				Same as 6.5 to 10.0 ft interval	φ	Recovered 2.5 ft sample in 10.0 to 15.0 ft interval		
91B19-12.0 to 15.0 ft LSD				medium to coarse angular sand; light yellowish brown (2.54 %); and angular fragments of debris 1/8 to 1 inch diameter	φ			
91B19-15.0 to 20.0 ft LSD				Clay; same as 6.5 to 12.0 ft interval with >20% sand; chalk & dolomite fragments 1/4 to 1 1/2 inch diameter; angular	φ	Drilled very slowly; drilled 15.0 to 17.5 ft puller sample took & recovered 2.0 ft sample; drilled 17.5 to 20.5 ft very slowly.		
91B19-20.0 to 23.0 ft LSD				Same as 15.0 to 20.0 ft interval		Drilled very slowly; hole cased to 4.5 ft when auger 7 1/2 inch diameter auger was removed from hole; finished well in 10 1/2 inch diameter; reamed bore hole; well built inside 10 1/2 inch auger		
TD = 23.0 ft LSD								

Project Name ANAD TASK #6
Project Number 35G 30600
Location ANAD Contamination Area, down gradient
Boring No. 91 B 19
Date 02/19/92

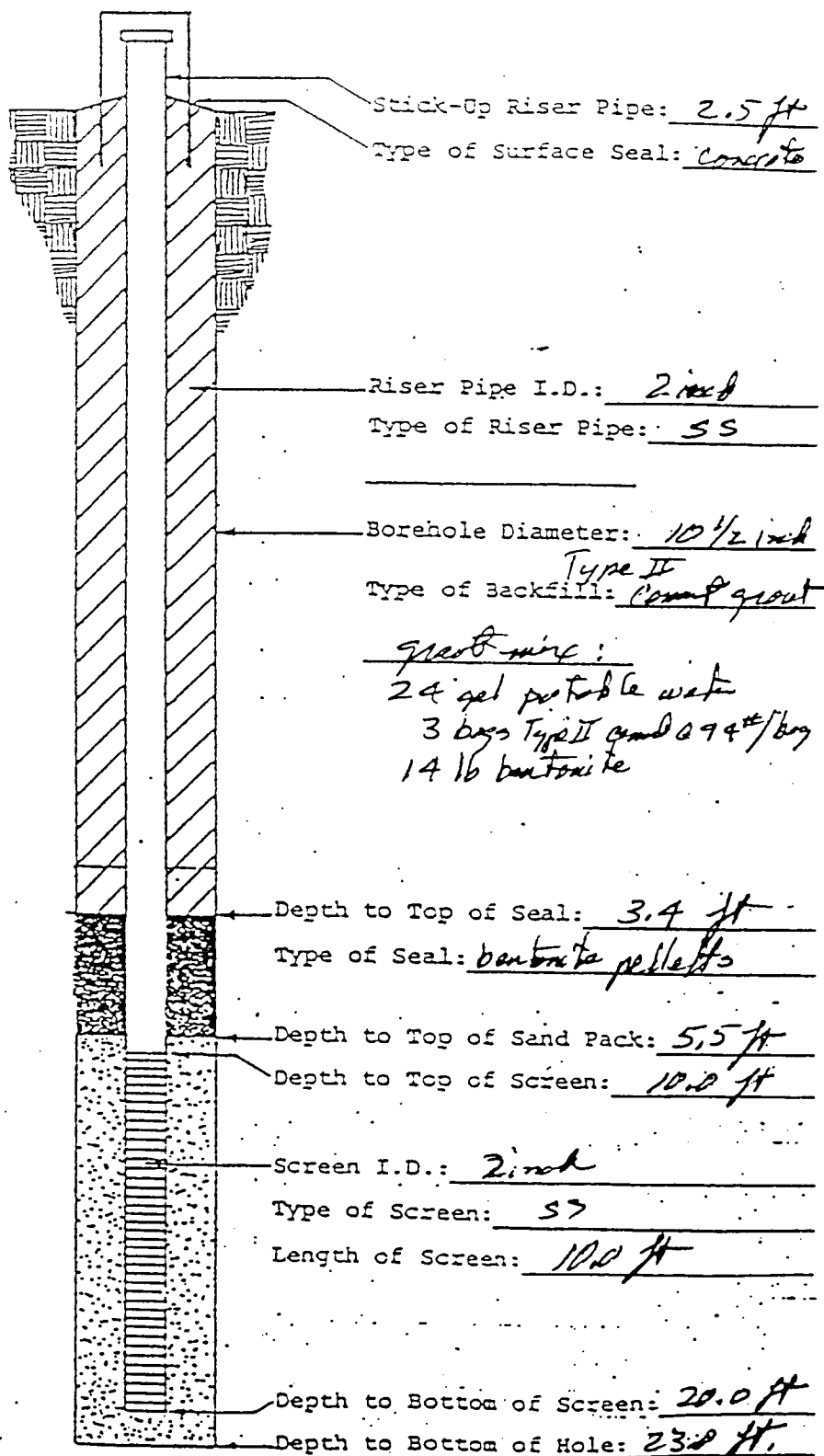
Driller ATEL, R. Scott

Drilling Method HSA

Development Method

Well Materials Used

2
Feet of 2-foot Riser 2 ft ss
Feet of 10-foot Riser 10 ft ss
Feet of Screen 10 ft ss
Caps bottom plug, top cap ss
Bags of Sand 3
Bags of Bentonite Powder 14 lb
Buckets of Pellets 1 1/2 (75 lb)
Bags of Cement 3
Bags of Concrete Mix
Le Covers 5 ft portable steel cross
th lock



well # 91B20

SWMU#26

FIELD BORING LOG

Project No. 35G306-00	Project Name ANAD TASK #6	Boring No. 91B20
Contractor Jacobs	Driller APEC - Jim	21 FEB 92
Well No. 411100003 3/4" ID	Casing 1 1/2" ID	Completed 21 FEB 92
Cased to UNKN	Soil drilled to -30'	Process Limit 110' D
Logged by SRC	Checked by	Date

Sample No.	Depth in feet	Blow per 8 inches	%/Roc	Description	EXT Jar	Comments on status of boring	Monitoring Recovered in 4' Auger
	0-5	—	100%	CLAY, Rd/bm 2.5YR <1 4/4 w/ gravel pebbles chert fragments, sand (2-50mm) Qtz angular and rounded to sub-rounded, poor sorting homogeneous clay matrix w/ 20- 25% clast, v. stiff and moist.		1230, NO PROBLEMS	5' in auger
	5-10	—	20%	AS ABOVE w/ higher % chert <1 limestone clast ~30-60%, unconsolidated, v. friable, moist to dry		NO PROBLEMS	1' in auger Btm 1'
	10-15	—	100%	AS ABOVE CLAY Rd/4/10, 5YR <1 6/8 v. homogeneous clay w/ 10-15% chert/Qtz clast angular, poorly sorted, v. stiff moist		NO PROBLEMS	5'
	15-20	—	30%	AS ABOVE <1		NO PROBLEMS	2' Btm Top
Sample No. 91B20K	20-25	—	25%	CLAY/SAND/GRAVEL Red 2.5YR 5/6 <1 chert, sand fragments pebbles (2mm-20mm) ~40-70% varying to 20-30% in undifferentiated layers v. wet, soft - semi stiff depending on clay cont		1530, NO PROBLEMS Collected Samples 91B201C - BNA, UOAS, TAL Metals & CYM, and Explosives. No dups due to not enough soil recovered	1 1/2' Top
	25-30	—	30%	AS ABOVE <1		1550, NO PROBLEMS v. little recovery due to water	2'

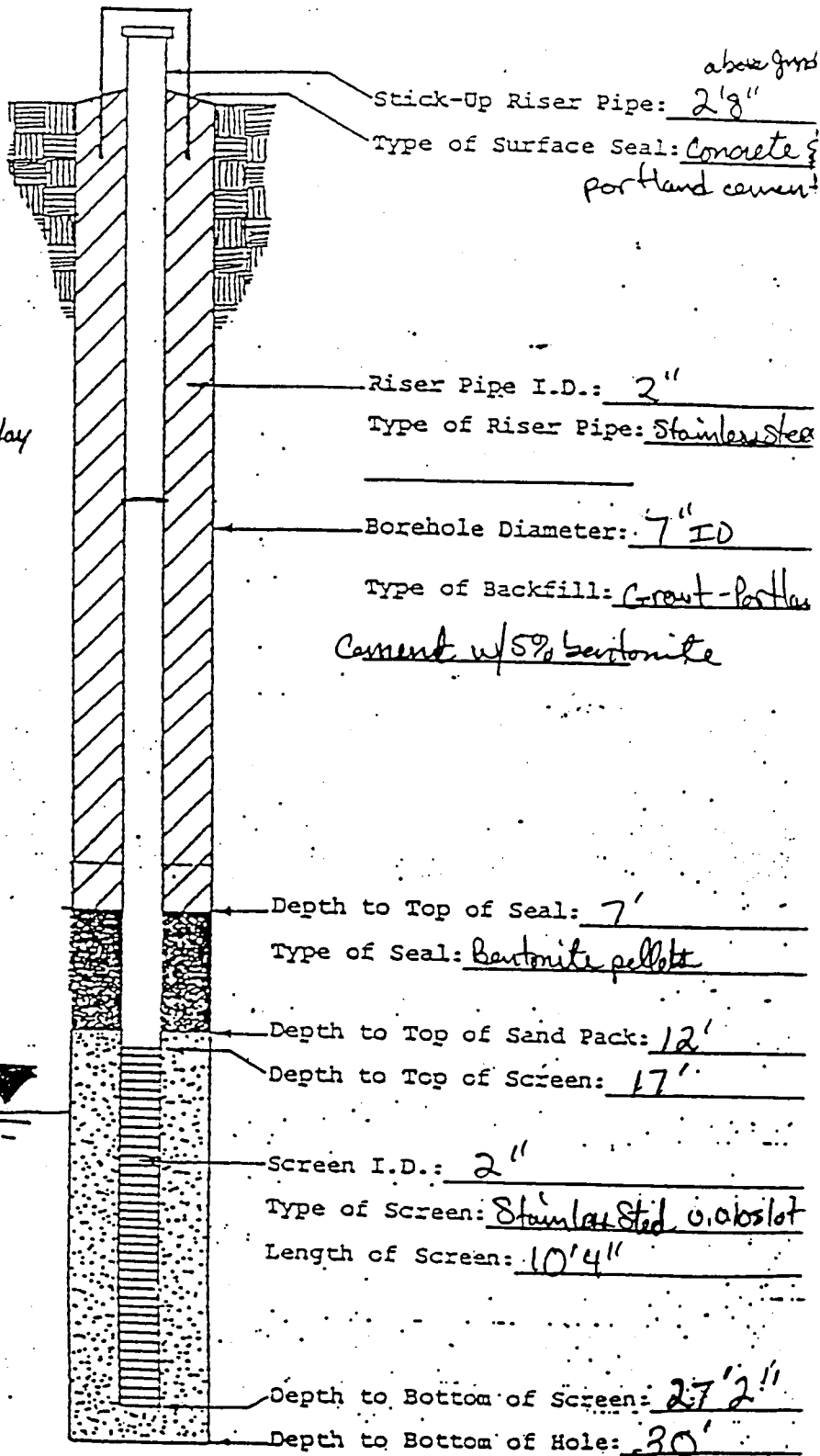
91B20 / SWMU #26

Project Name ANAD TASK #6
 Project Number 3SG-306-00 / WBS 302
 Location SWMU #26
 Logging No. 591B20
 Date 21 FEB 92

Driller ATEC - Jim Plinske
- Tom Stelz
 Drilling Method Hollow Stem Auger 3/4" ID
 Development Method

Well Materials Used

Feet of 5-foot Riser
 Feet of 10-foot Riser 2X10
 Feet of Screen 10'4"
 Caps. 3" X 2
 Bags of Sand 4
 Bags of Bentonite Powder 10 lbs Vofclay
 Buckets of Pellets 1 bucket
 Bags of Cement 2 bags gravel
 Bags of Concrete Mix 15
 Hole Covers



FIELD BORING LOG

91B21

Project No. 35G30600	Project Name ANAD TASK #6	Boring No.
Contractor ATEL	Driller J. Campbell	Page 1 of 2
Location HSA	Coring Unit	Completed
Drilled at	Soil drilled	Project Level
Drilled by R. Harder	City of	Total depth 35.0
	Date 02/24/92	

Sample No.	Depth in feet	Blows per 6 inches	Pen No.	Description	HYD Jar	Comments on nature of boring	Monitoring
91B21- Φ 3.7 P+LSO	Φ 3.7			dark red (2.5YR ^{3/6}) Sandy, stiff, dry clay	Φ	Drilled Φ 5.0 ft easily. Recovered 5.0 ft sample	
5091B21K Φ 91B21- 3.7 to 5.0 P+LSO	3.7 to 5.0			olive yellow (2.5Y6/6) Sandy, slightly plastic clay			
91B21- 5.0 to 6.3 P+LSO	5.0 to 6.3			same as 3.7	Φ	Drilled 5.0 to 10.0 ft easily. Recovered 5.0 ft sample	
5091B212C 5091B219C Φ 91B21- 6.3 to 10.0 P+LSO	6.3 to 10.0			mottled yellowish brown (10YR 5/6), light gray (N7), and red (2.5YR 4/6) dry sandy clay		Soil sample 5091B219C is a duplicate sample	
5091B213C Φ 91B21- 10.0 to 15.0 P+LSO	10.0 to 15.0			same as 6.3 to 10.0 ft interval	Φ	Recovered 4.0 ft sample	
91B21- 15.0 to 20.0 P+LSO	15.0 to 20.0			mottled red (2.5YR 4/6) and olive yellow (2.5Y 6/6) stiff, dry sandy clay	Φ	Recovered 5.0 ft sample	
91B21- 20.0 to 25.0 P+LSO	20.0 to 25.0			same as 15.0 to 20.0 ft interval but slightly plastic	Φ	Recovered 5.0 ft sample	
91B21- 25.0 to 30.0 P+LSO	25.0 to 30.0			same as 15.0 to 20.0 ft interval but moderately plastic	Φ	Drilled 25.0 to 30.0 ft slow. Recovered 5.0 ft sample	

91321

Page: 35630600

Project name ~~ANAD~~ TASR #6

~~2~~ 2 a 2

Case: ARZ

Dr. H. J. Campbell

Deutscher Verlag

Casey, Richard

Worm HSA

Closing 11/22

BTU 117/102

Propaganda Land

Contd. at

Soll der/die

 Below grade

Total drops 35.0 *lf*

10/10/57 R. A. Gaudin

Q'd y

Date 02/24/97

Sample No.	Depth in foot	Blows per 6 inches	Pen Rod	Description	HYU Jar	Comments on nature of bearing	Monitoring	
							HYU	LZL
5091B214C f 91B21- 30.0 to 33.2 ft LSO	30.0 to 33.2			Same as 15.0 to 20.0 ft but plastic; 31.5 to 33.2 ft interval saturated.	Q	Drilled 30.0 to 35.0 ft LSO Recovered 4.4 ft sample		
91B21- 33.2 to 34.5 ft LSO	33.2 to 34.5			Very fractured gray (N5) dolomite and angular dolomite fragments; saturated		First encountered water at 33.2 ft.		
91B21- 34.5 to 35.0 ft LSO	34.5 to 35.0			saturated red (2.5% R+G) sandy clay.				
TD = 35.0 ft								

Project Name ANAD TASH #6

Project Number 35630600

Location _____

Boring No. 91821

Date 02/24/92

Driller ATEZ, J. Campbell

Drilling _____

Method HSA

Development _____

Method _____

Well Materials Used

RM 2

Feet of 8-foot Riser 2.0 SS

Feet of 10-foot Riser 30.0 SS

Feet of Screen 5.0 SS

Caps bottom plug & top cap SS

Bags of Sand 4 1/2

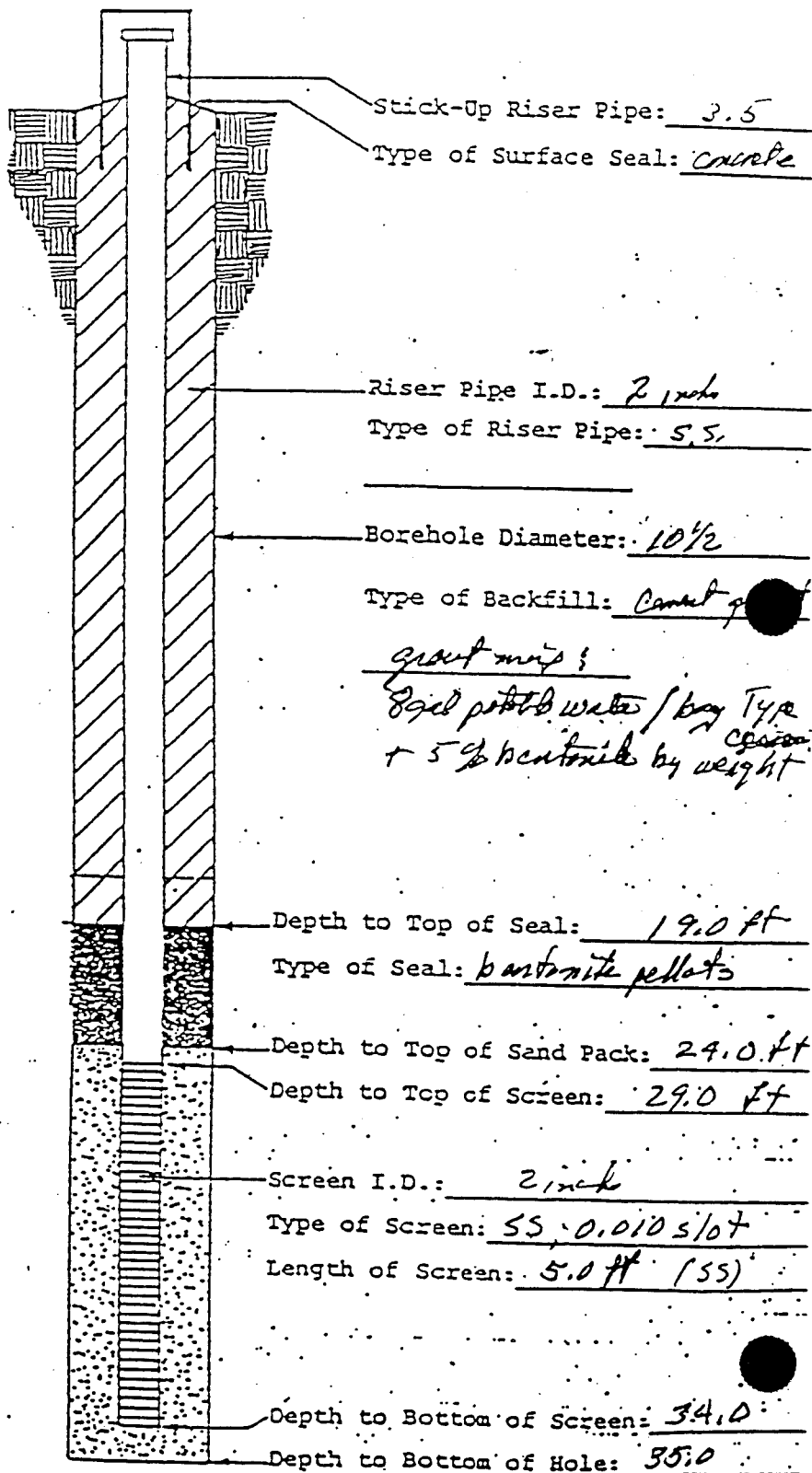
Bags of Bentonite Powder _____

Buckets of Pellets 2 1/2 (125 lb)

Bags of Cement 10094 # bag

Bags of Concrete Mix _____

Hole Covers 5 ft steel w/ lock



Boring No. 91B22
 Page 1 of 2
 Completed 2.22.92
 Project Level D
 Total depth 28'

Comments on Status of Boring	Monitoring	
	HNU	LEL
PROBLEMS NOTING NG 0.0 over n of CORE	3.0 IN AUGERS @ 5'	
Problems NOTING BORING 0.0 OVER n of CORE	HNU 0.1 IN AUGERS @ 10'	

Boring No. 91B22
 Page 2 of 2
 Completed 2.22.92
 Project Level D
 Total depth 28'

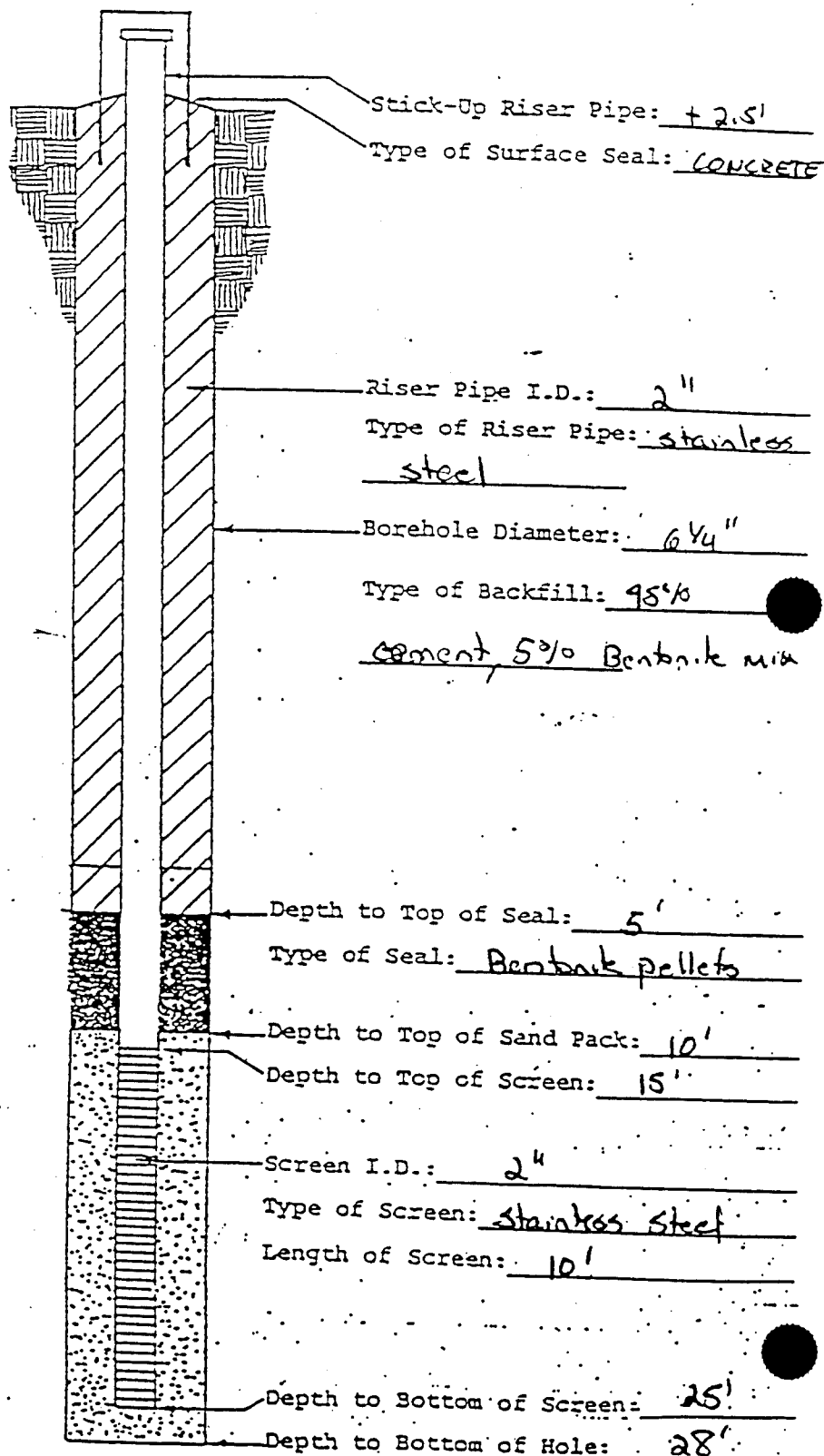
No.	Pier No.	Description	HNU Jar	Comments on Status of Boring	Monitoring	
					HNU	LEL
	100%	10'-15'- MOHLED 2.5Y 4/8 RED AND 10YA Q16 BROWNISH Yellow MOIST SILTY CLAY w/ some COARSE QUARTZ AND DOLOMITE GRAVEL.	0.0 IN w/ 1 SAMP.	NO PROBLEMS ADVANCING BORING HNU 0.0 over length of CORE	0.1 IN AUGERS @ 15'	
1	90%	SAME AS ABOVE, however, wet	0.0 IN RED SAMP.	NO PROBLEMS HNU 0.0 over length of CORE	0.1 IN AUGERS @ 20'	
	50%	5YR 4/2 Yellowish Red wet clay w/ black organic matter and coarse Dolomite and quartz gravel w/ minor Red nodding.	0.0 IN 2 1/2 15' JAR	NO PROBLEMS ADVANCING BORING	0.2 IN AUGERS @ 25'	
	50%	SAME AS ABOVE	—	No problems	0.1 IN AUGERS @ 28'	

Project Name ANAD / EST
Project Number 35G30600
Location SWMU # 27
Drilling No. 91825
Date 8.22.91

Driller ATEC
Drilling Method Hollow Stem Auger
Development Method

Well Materials Used

Feet of 2-Foot Riser - 2'
Feet of 5-foot Riser 5'
Feet of 10-foot Riser 10'
Feet of Screen 10' 0.010 slot
Caps 1 end, 1 top
Bags of Sand 2 1/2
Bags of Bentonite Powder 3/10
Buckets of Pellets 1 1/4
Bags of Cement 3
Bags of Concrete Mix
Well Covers 1 steel stick-up.



Boring no 91B23
 26 No 1 & 3
 192 Completed 2.7.92
 1 Progress level D
 36.5' Total depth 37.5'

Comments on nature of boring	Monitoring	
	HYU	LEL
NO PROBLEMS	0.1 IN AUGERS @ 5'	
NO PROBLEMS	0.1 IN AUGERS @ 10'	

Boring no 91B23
 ANAD/ESI/TASK6 No 2 & 3
 192 Completed 2.7.92
 00 ENU 1L7/102
 36.5' Below grad 36.5' Total depth 37.5'
 Date

Description	ENU jar	Comments on nature of boring	Monitoring	
			HYU	LEL
10'-14' SAME AS ABOVE	20.1	NO PROBLEMS	0.2 IN AUGERS @ 15'	
14'-15' MOTTLED 10YR 7/1 LIGHT GRAY 2.5 YR 4/8 RED, AND 10YR 5/8 YELLOWISH BROWN MOIST. CLAYEY SILT WITH MINOR LIMESTONE AND QUARTZ FINE GRAVEL AND FINE SAND				
2.5 YR 5/8 RED MOIST CLAY WITH SOME 10YR 6/8 BROWNISH YELLOW MOTTLING AND MINOR SILT W/ SOME FINE DIOMITE GRAVEL + LIMESTONE	0.3	NO PROBLEMS	0.1 IN AUGERS @ 20'	

FIELD BORING LOG

Project No. 20600	Project Name ANAD / ESI / TASK 4	Boring No. 91B23
Contractor JEG	Driller ATEC	No 3 of 3
Method HSA	Casing Size 6" OD	Completed 2-7-92
Cased to	Soil drilled	Projected Level D
Logged by DAI	Cut by	Total depth 37.5'
	Date	

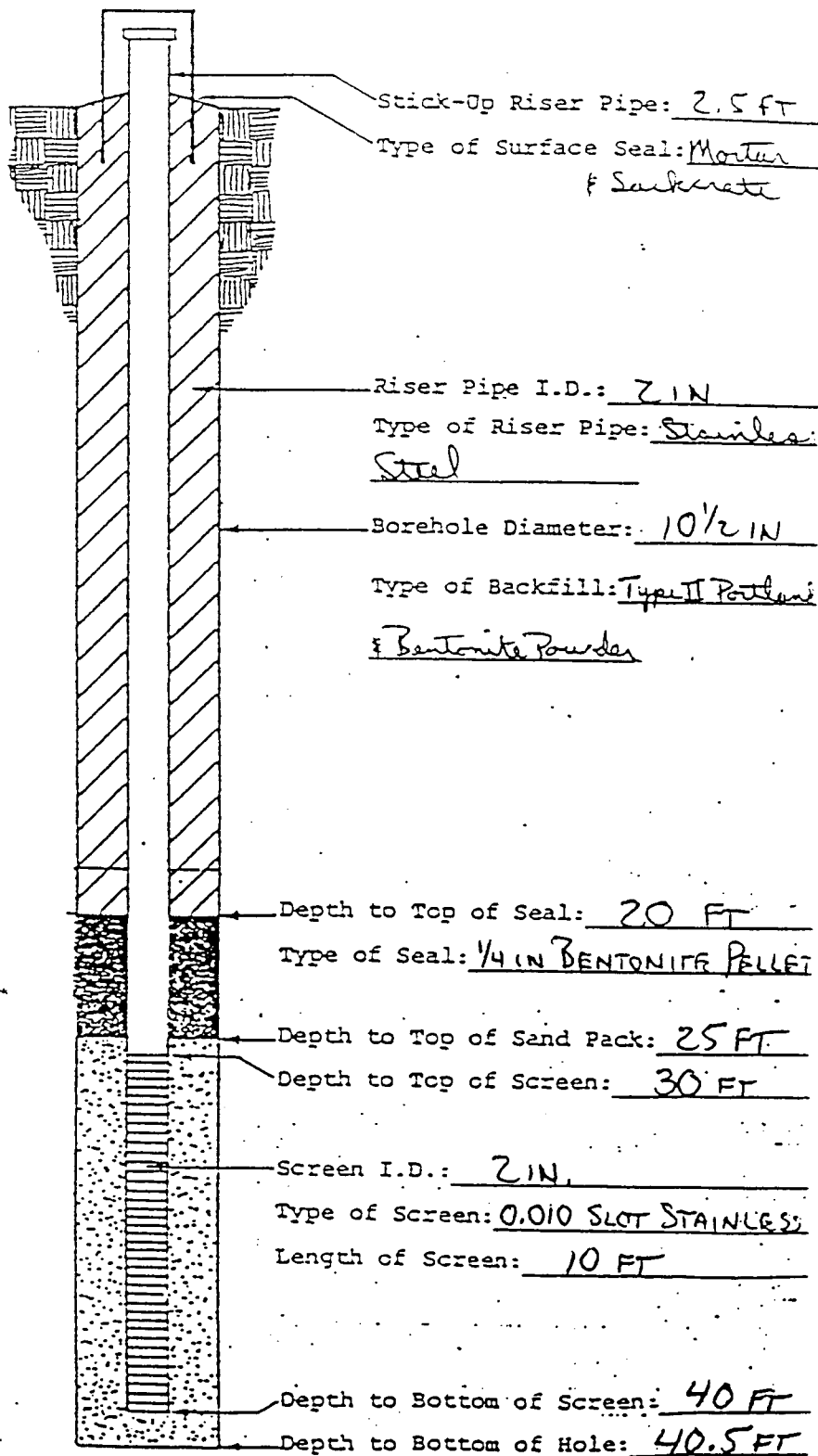
Sample No.	Depth in feet	Blows per 6 inches	Pen. Test	Description	SPT Jar	Comments on nature of boring	Monitoring	
							HYD	LEL
NO SAMPLE	20'-25'		100	2.5 YR 4/8 R&O CLAY WITH SOME MEDIUM SAND AND FINE GRAVEL. COMPOSED OF LIMESTONE, DOLOMITE AND QUARTZ AND SOME BLACK ORGANIC MATTER.	0.2	NO PROBLEMS	0.5 IN AUGERS @ 25'	
NO SAMPLE	25'-30'		100	SAME AS ABOVE, however, less MEDIUM AND FINE SAND.	20.1	NO PROBLEMS	0.2 IN AUGERS @ 30'	
NO SAMPLE	30'-35'		100	SAME AS ABOVE	20.1	NO PROBLEMS - STEAM BEING EMITTED FROM HOLE HNU NOT FUNCTIONING W/ STEAM FOGGING LAMP	?	
SAMPLE 5091B23-1 + QA DUPLICATE 5091B23-2 EQUIPMENT RINSE ER91B23-1	35'-37.5'	Δ 36.5'	100	SAME AS ABOVE, HOWEVER, WET. WATER @ \approx 36.5'. SOME PIECES OF LIMESTONE IN SIDE OF SAMPLER	? 20.1	REFUSAL @ 37.5' Same problem w/ HNU as above	?	

Project Name ANAD ESI
Project Number 35G30600
Location SWMU 27 (UPGRADIENT)
Boring No. 91323
Date 2/11/92

Driller ATEC / RICHARD
Drilling Method HSA 10 1/2 IN BIT
Development Method _____

Well Materials Used

Feet of 5-foot Riser 2.5
Feet of 10-foot Riser 30
Feet of Screen 10
Caps 2
Bags of Sand 7 3/4
Bags of Bentonite Powder 3/4
Buckets of Pellets 3
Bags of Cement 7
Bags of Concrete Mix _____
Pipe Covers _____



FIELD BORING LOG

Project No. 35630400		Project Name ANAD / ESI TASK6		Boring No. 91B24
Contractor JEG	Driller ATCC	Drilled 2-13-92	Completed 2-13-92	Log 1 of 4
Method HSA	Casing size	BTU 1.17 (1.2)	Procedure Level D	
Ground at	Soil drilled	Below grad 34.5	Total depth 40	
Logged by DAI	Ch'd by	Date		

Sample No.	Depth in feet	Blows per 8 inches	Pen Rod	Description	BTU	Comments or Location of boring	Monitoring	
							HTU	LZL
Geotech Sample only	0'-5'		100	0'-5' 54R 5/8 YELLOWISH RED MOIST SILT WITH SOME CLAY, SOME DOLOMITE AND COARSE GRAVEL AT SURFACE AND FINE TO MEDIUM DOLOMITE GRAVEL THROUGHOUT MATRIX AND MINOR WOODY MATTER @ 5'	—	NO PROBLEMS ADVANCING BORING PIN 0.0 OVER LENGTH OF CORE	3.5 IN AUGERS @ 5'	
Geotech SAMPLE 7'-8'	5'-10'		90	5'-6.5' SAME AS ABOVE 6.5'-8' 7.8YR H/4 BROWN- DARK BROWN MOIST SILT WITH SOME MINOR CLAY AND MEDIUM DOLOMITE GRAVEL	—	NO PROBLEMS, PIN 0.0 OVER LENGTH OF CORE	0.8 IN AUGERS @ 10'	
				8'-10' 10 YR 6/6 BROWNISH YELLOW VERY MOIST SILT W/ SOME CLAY AND MEDIUM TO FINE DOLOMITE GRAVEL				
Q410 Chemical SAMPLE 91B24K								

FIELD BORING LOG

Project No. 35630600	Project Name ANAD / ESI	Boring No. 91B24
Contractor JEG	Driller ATEC	Drilled 2-13-92
Method TSA	Casing Size	Completed 2-13-92
Cased at	Soil drilled	Procedure Level D
Logged by DAI	Ch'd by	Total depth 40
	Date	

Sample No.	Depth in foot	Blows per 6 inches	Pen. Head	Description	SPT Jar	Comments on nature of boring	Monitoring	
							HTU	LL
Geotech 12'-13'	10-13'		80	10'-12' SAMPLE AS ABOVE W/ MORE MEDIUM DOLOMITE GRAVEL		Very Hard Drilling from 10.5' - 13' HNU 0.0 OVER LENGTH OF CORE	0.5 IN AUGERS @ 13'	
				12'-13' 104R 6 1/2 LIGHT BROWNISH GRAY AND 7.5 4R 3/8 STRONG BROWN MOIST CLAYEY SILT W/ MEDIUM DOLOMITE AND CHERT GRAVEL				
Chemical SAMPLE 13'-14' 9102424	13'-15'		100	13'-14' 84R 4/8 Yellowish R.R. moist silt with abundant coarse and medium dolomite gravel		HARD DRILLING 13'-14' SLOW DRILLING 14'-15' HNU 0.0 13'-14' 0.5 14'-15'	0.5 IN AUGERS @ 15'	
				14'-15' 104R 5 1/2 Yellowish brown moist clayey silt with some dolomite and chert medium gravel and some minor organic matter				
Geotech SAMPLE 14'-15'								

FIELD BORING LOG

Project No. 35630406	Project Name ANAD / ESI	Boring No. 91B24
Contractor JEG	Driller ATEL	Day 3 of 34
Method HSA	Casing Size	Completed 2.13.92
Ground Cl	Soil drilled	HYD 11.7/10.2
Logged by DAI	Cmd by	Pressure Level D
	Date	Total depth 40

Sample No.	Depth in feet	Blows per 6 inches	Pen Rod	Description	HYD	Comments on advance of boring	Monitoring	
							HYD	LEL
Geotech + Chemical 19'-20' 91B243L	15'-20'		70	15'-17' SAME AS ABOVE		NO PROBLEMS ADVANCING BORING HNH 0.4-3.0 OVER LENGTH OF CORE	NO AUGER MESS- W/ HNH	
				17'-17.5' 5/8" 416 YELLOWISH RED MOIST CLAYEY SILT W/SOME FINE DOLOMITE GRAVEL				
				17.5'-19.8' SAME AS 14'-15'				
				19.8'-20' SAME AS 17'-17.5'				
Geotech 24'-25'	20'-25'		100	20'-25' MOTTLED 10/8 G/8 BROWNISH YELLOW AND 10/8 3/8 RED SILTY CLAY WITH COARSE, MEDIUM, AND FINE GRAIN DOLOMITE, LIMESTONE AND CHERT GRAVEL AND SOME BLACK ORGANIC MATTER		NO PROBLEMS ADVANCING BORING 0.1-0.2 OVER LENGTH OF CORE	NO HNH	
Chemical SAMPLE 91B244L	25'-30'		100	25'-30' SAME AS ABOVE		NO PROBLEMS ADVANCING BORING HNH 0.5 IN AUGERS @ 30' HNH 0.1-0.2 OVER LENGTH OF CORE		

FIELD BORING LOG

Project No. 35630600	Project Name ANAD / EST	Boring ID 91824
Contractor JEG	Driller ATEC	Page 4 of 4
Method HOA	Coring Unit	Completed 2.13.92
Ground at	Soil drilled	BNV 117/002
Logged by DAI	Checked by	Project Level D
	Date	Below grad 39.5'
		Total depth 40'

Sample No.	Depth in foot	Blows per 6 inches	Pen Rod	Description	BNV Log	Comments on advance of boring	Monitoring	
							BNV	LZL
Geotech Sample 34'-35'	30-35'		100	7.5 4R 5/8 STRONG BROWN MOIST CLAY w/ MINOR SILT AND COARSE, MEDIUM AND FINE CHERT, LIMESTONE, AND DOLOMITE GRAVEL AND SOME BLACK ORGANIC MATTER IN MATRIX	-	NO PROBLEMS ADVANCING BORING HNU 0.2-0.4 OVER CORE ↓ MOISTURE INTERFERENCE w/ LAMP	HNU	LZL
Chemical Sample 39'-40' 918245C Geotech Sample	35'-40'		100	35'-40' 5/8 RED MOIST TO WET CLAY w/ SOME MINOR SILT, COARSE, MEDIUM AND FINE DOLOMITE CHERT, AND LIMESTONE GRAVEL w/ MINOR BLACK ORGANIC MATTER	-	NO PROBLEMS ADVANCING BORING HNU LAMP BURNED OUT → ↓		

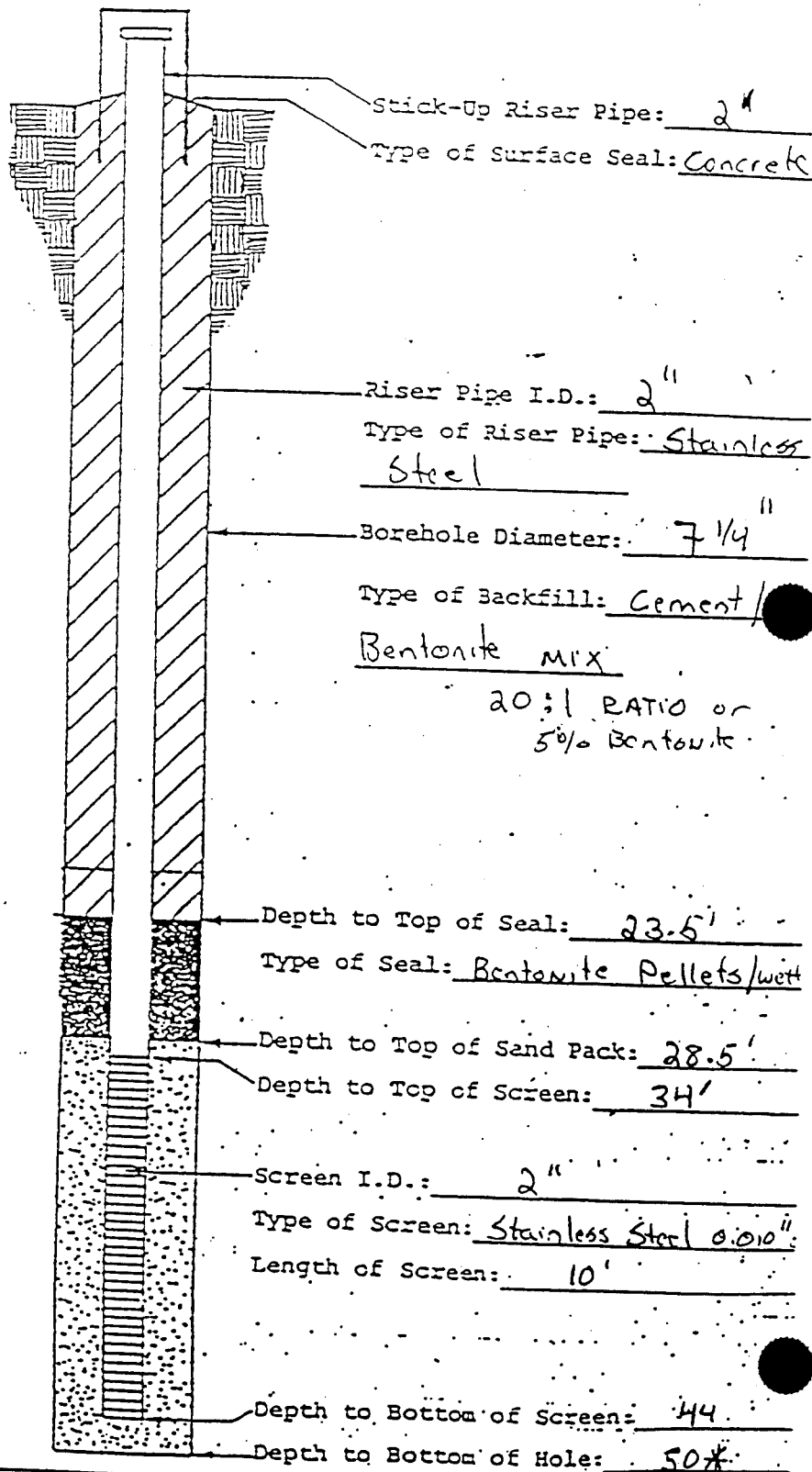


Project Name ANAD / EST
Project Number 35G-30600
Location SWMU 35
Drilling No. 91824
Date 2-13-92

Driller ATEC
Drilling Method Hollow Stem Auger
Development Method

Well Materials Used

Feet of 2-foot Riser - 6
Feet of 5-foot Riser φ
Feet of 10-foot Riser 40 30'
Feet of Screen 10
Caps END AND TOP (2)
Bags of Sand 3
Bags of Bentonite Powder 1/2
Buckets of Pellets 1
Bags of Cement 5
Bags of Concrete Mix
Hole Covers



* Hole CAVED TO 44'

Appendix C

Geophysical Survey Reports by UXB and Technos

NOTE: All work done by UXB was conducted in the ASA.

NOTE: The work conducted by Technos was located in the ASA and the SIA. A single report was issued for both areas. To serve as an appendix to the ESI Report, pages that contain only discussion of SIA related investigations have been deleted. Figures relate to SIA SWMUs have been removed.

PROJECT REPORT
FOR UXO SERVICES
PROVIDED BY

UXB INTERNATIONAL, INC.
14800 CONFERENCE CENTER DRIVE, SUITE 100
CHANTILLY, VIRGINIA 22021
(703) 803-8904

ANNISTON ARMY DEPOT ACTIVITY
ANNISTON, ALABAMA

FOR

JACOBS ENGINEERING GROUP, INC.
1234 NATIONAL PRESS BUILDING
529 14TH STREET, N. W.
WASHINGTON, D.C. 20045

3.2 Task 2 - Field analysis of soil samples for TNT and RDX

Field analysis of soil samples was performed from January 3 to February 10, 1992, by UXB Technicians Daniel Stephens and David Pollard. Both of these technicians were certified to perform TNT and RDX analysis through Spectralytix Environmental & Analytical Services using the USATHAMA approved field methods. Copies of their training certificates are included in Appendix (B) along with the test results.

3.3 Task 3 - Bore hole geophysics - UXB Technician Daniel Isbell performed down hole monitoring for metallic contacts in the auger path of proposed well sites at SWMU 16 and SWMU 17. He also provided safety briefs to the drill crews, UXO safety escort services, and demonstrated the Foerster Ferex Ordnance Locator in the surface sweep and underwater mode for USATHSMA visitors.

APPENDIX A
SCOPE OF WORK

1.0 INTRODUCTION

This project report is submitted by UXB International, Inc., to Jacobs Engineering Group, Inc., at the completion of UXO services provided at Anniston Army Depot, Anniston, Alabama from December 9, 1991 through February 20, 1992.

1.1 APPENDICES

The scope of work is included as Appendix (A) and is summarized in section 2.0. Appendix (B) contains the results of the field analysis for TNT and RDX. Appendix (C) is the daily work log submitted by the UXB Project Leader.

2.0 SCOPE OF WORK

The Scope of Work is included in this report as Appendix (A) and is summarized here. The project was divided into the following three tasks for UXO services:

Task 1 - Well Site and Access Clearance - UXB technicians cleared paths fifteen feet wide and 2 feet deep from the nearest established roadway to the proposed locations of all wells. A 75 foot radius was cleared around each well site to a depth of 2 feet. Wooden stakes four feet in height with orange flagging tape were used to mark the cleared paths and well sites for safe maneuvering of the drill rigs.

Task 2 - Field Analysis of Soil Samples for TNT and RDX - Soil samples from proposed well sites in areas suspected of containing a reactive amount of explosive compounds will be analyzed using the USATHAMA Field Method for determining TNT and RDX concentrations. Samples from the surface and depths of 2.5, 5.0, 7.5, 10, 12.5, and 15 feet will be analyzed. If any concentration of over 10 % reactive compounds are found, the well site will be considered an explosive hazard area.

Task 3 - Bore Hole Geophysics - One UXB technician will monitor ahead of the auger using a Foerster Ferex Ordnance Locator to check for metallic contacts. If a significant metallic contact is discovered, the well site will be abandoned and relocated a minimum of ten feet.

3.0 PERFORMANCE OF FIELD WORK

All field work has been completed without any UXO related incidents having occurred.

3.1 Task 1 - Well Site and Access Clearance

Well site and access clearance was performed from December 9 - 17, 1991. The following UXB personnel were on site:

Project Leader.....Thomas O'Niell
UXO Specialist.....Daniel Isbell
UXO Technician.....Gregory Miclette

The following is a list of UXO items recovered by UXB personnel during the performance of site clearance operations:

SWMU 17 (Demo Pit)

10 Dec 91 20 mm HE, unfuzed, 1 ea
 75 mm HE, unfuzed, 1 ea

Approximately 150 pounds of inert ordnance scrap (mostly fragments) of 20 mm and 75 mm projectiles, 4.2" mortar, 105 mm, 155 mm, 8" projectiles, 2.36" and 3.5" rockets, 100 lb and 750 lb bombs.

11, 12 Dec 91

20 mm HE, fuzed, 7 ea
2.75" Fleshette rocket warheads, 6 ea
75 mm HE, unfuzed, 2 ea
105 mm WP, unfuzed, 3 ea
105 mm HE, unfuzed, 1 ea
Various sized bomb boosters, 4 ea

Approximately 600 pounds of inert ordnance scrap (mostly fragments) consisting of the same variety as found on the 10th of December.

SWMU 16 (Burning Ground)

14 Dec 91

Approximately 150 pounds of ordnance scrap consisting of mostly 20 mm, 75 mm, 105 mm, and various size bomb fragments. No explosive filled ordnance items were found this day.

SCOPE OF WORK, REVISION 1

SUBCONTRACT NO. 05-G302-S-91-0001

The possibility of finding unexploded ordnance (UXO) or explosives is a possibility at SWMU's Nos. 5, 8, 10, 11, 14, 16, 17, 27 and 35. Therefore, a USATHAMA approved, UXO contractor with assistance from local Explosive Ordnance Disposal (EOD) team members and ANAD Safety office will coordinate the field work effort in these areas. The areas will be surface cleared of UXO and explosives prior to any geological work, soil boring or drilling activities.

During soil boring where UXO are suspected, the drill bit will be retracted at 2 to 4 feet intervals and the UXO technician, using MK-26 Ordnance Locator, will search ahead of the drill bit for metallic contacts. If suspicious contact is discovered, the site will be abandoned and moved at least 10 feet. Search will continue until the drill has reached at least 25 feet in depth. During test pitting where UXO are suspected, the UXO technician, using a MK-26 Ordnance Locator, will search ahead of the backhoe bucket at 2 to 4 feet intervals. If UXO are encountered, the UXO contractor will mark the item's location and contact the EOD Unit at ANAD and arrange for the item to be removed or rendered safe.

The location of all identified or suspected UXO's will be marked, and reported to the local ANAD EOD Unit. The UXO contractor will assist in developing a "render safe" plan for all UXO.

Soils contaminated with explosives are thought to be a factor at SWMU's #14 Laundry Waste Leaching Facility, #16 Burning Ground, #17 Demolition Pit, #27 TNT Burial Pits and #35 DEACT Furnace. No Field investigation work will be conducted at these sites without direct supervision of the ANAD Safety office and EOD team.

The following steps will be followed to ensure the safety of all personnel on the well drilling site and/or soil boring:

- a. A clear team consisting of two UXO Technicians will conduct a surface visual sweep of the proposed route the drilling rig will take from the road to the drilling site and clear a path fifteen feet wide. They will maintain a line of sight with each other at all times and maintain communication with other field crew members and the command post.
- b. If unexploded ordnance is encountered, they will attempt to find a clear route around the hazardous item. If this cannot be done, because of rough terrain or an abundance of hazardous items in the area, unexploded ordnance that can be moved remotely will be placed outside the area to be cleared.
- c. If unexploded ordnance encountered is not safe to be moved, the UXO project leader will mark the item's location and contact the ANAD Army EOD, at 235-7541 and arrange for the item to be blown in place.

- d. Using marking stakes and lines as necessary UXB/UXO Technicians will mark the outer perimeter of the cleared area.
- e. Two UXO Technicians will then conduct a geophysical survey of this area, using a Ferex locator, to located metallic items to a minimum depth of three feet. All metallic contacts will be marked with stakes and an alternate clear path for the drilling rig will be used.
- f. If an alternate path cannot be found, the marked locations will be hand excavated by UXO technicians to a maximum depth of three feet and buried ordnance will be handled in accordance with (b) and (c) above.
- g. During well installation, the drill bit will be retracted every 4 feet and one UXO Technician, using the Ferex locator, will search ahead of the drill bit for metallic contacts. If a significant metallic contact is discovered, the drilling site will be abandoned and moved at least 10 feet. This procedure will continue until the drill has reached a depth of a least 20 feet.
- h. *As necessary, the Subcontractor shall perform a field screening chemical procedure for RDX and TNT compounds as prescribed by USATHAMA.*

The UXO Project Supervisor Safety Officer, and Technicians have the authority and responsibility to immediately stop work and take corrective action when an unsafe situation is encountered. Standard EOD procedures will be employed in the investigation and handling of ordnance and other hazardous items until it is determined that no explosive hazard exists.

A command post will be established prior to conduction of any field operations. All UXO Technicians operating away from the command post will have radio communications with the command post and the command post will have communication, via portable telephone, with the local fire, ambulance and police departments and the ANAD EOD, team.

APPENDIX B
RESULTS OF
FIELD ANALYSIS FOR TNT AND RDX

TESTS RESULTS

JANUARY 8, 1992

TNT CALIBRATION TESTS

SOLUTION CONC.	ABSORBANCE
0 ug/g	.003 au
1.0 ug/g	.021 au
2.0 ug/g	.053 au
5.0 ug/g	.106 au
10.0 ug/g	.225 au
20.0 ug/g	.461 au

base response factor (rf) TNT

$$.225\text{au}/10.0 \text{ ug/g} = .023$$

TNT SOIL SPIKE TESTS

SPIKE CONC.	ABSORBANCE
0.0 ug/g	.000
1.0 ug/g	.017
2.0 ug/g	.036
5.0 ug/g	.103
10.0 ug/g	.246
20.0 ug/g	.456

RDX CALIBRATION TESTS

SOLUTION CONC.	ABSORBANCE
0 ug/g	.005 au
1.0 ug/g	.016 au
2.0 ug/g	.042 au
5.0 ug/g	.080 au
10.0 ug/g	.156 au
20.0 ug/g	.307 au

base response factor RDX

$$.156\text{au}/10.0 \text{ ug/g} = .016$$

RDX SOIL SPIKE TESTS

SPIKE CONC.	ABSORBANCE
0.0 ug/g	.004
1.0 ug/g	.019
2.0 ug/g	.036
5.0 ug/g	.078
10.0 ug/g	.173
20.0 ug/g	.345

JANUARY 9, 1992

TNT CALIBRATION TEST

CONC.	ABSORBANCE	
10.0 ug/g	.223	rf = .022

TNT SOIL SPIKE

CONC	ABSORBANCE
0.0 ug/g	.002
2.0 ug/g	.038

WELL SITE 91B12-1

DEPTH	TNT
surface	.000/.022 = na
2.5 feet	.001/.022 = na
5.0 feet	.000/.022 = na
7.5 feet	.002/.022 = na
10.0 feet	.000/.022 = na
refusal, moved well site	

RDX CALIBRATION TEST

CONC.	ABSORBANCE	
10.0 ug/g	.143	rf = .014

RDX SOIL SPIKES

CONC	ABSORBANCE
0.0 ug/g	.002
2.0 ug/g	.031

RDX
.028/.014 = 2 ug/g
.044/.014 = 3.1 ug/g
.036/.014 = 2.6 ug/g
.014/.014 = na
.025/.014 = 1.8 ug/g

SITE 91B12-2

surface .119/.022 = 5.4 ug/g .070/.014 = 5ug/g
 Program Manager moved site due to surface results

SITE 91B12-3

surface	.015/.022 = na	.020/.014 = 1.4 ug/g
2.5 feet	.002/.022 = na	.010/.014 = na
5.0 feet	.002/.022 = na	.001/.014 = na
7.5 feet	.007/.022 = na	.004/.014 = na
10.0 feet	.000/.022 = na	.005/.014 = na
12.5 feet	.000/.022 = na	.003/.014 = na
15.0 feet	.000/.022 = na	.007/.014 = na

SITE 91B11-1

surface .007/.022 = na .034/.014 = 2.4 ug/g

JANUARY 13 1992

TNT CALIBRATION TEST

CONC	ABSORBANCE	
10.0 ug/g	.224	rf = .022

RDX CALIBRATION TEST

CONC	ABSORBANCE	
10.0 ug/g	.128	rf = .013

TNT SOIL SPIKES

CONC	ABSORBANCE
0.0 ug/g	.001
1.0 ug/g	.031

RDX SOIL SPIKES

CONC	ABSORBANCE
0.0 ug/g	.004
1.0 ug/g	.017

SITE 91B18-1

DEPTH	TNT	RDX
surface	.002/.022 = na	.023/.013 = 1.8 ug/g

SITE 91B18-2

surface	.003/.022 = na	.010/.013 = na
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SITE 91B19-1

surface	.002/.022 = na	.018/.013 = 1.4 ug/g
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SITE 91B19-2

surface	.001/.022 = na	.023/.013 = 1.8 ug/g
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JANUARY 15 1992

TNT CALIBRATION TEST

CONC	ABSORBANCE	
10.0 ug/g	.213	rf = .021

RDX CALIBRATION TEST

CONC	ABSORBANCE	
10.0 ug/g	.136	rf = .014

TNT SOIL SPIKES

0.0 ug/g	.000
1.0 ug/g	.020

RDX SOIL SPIKES

0.0 ug/g	.002
1.0 ug/g	.015

SITE 91B11-1

DEPTH	TNT	RDX
2.5 feet	.006/.021 = na	.002/.014 = na
5.0	.003/.021 = na	.003/.014 = na
7.5	.006/.021 = na	.001/.014 = na
10.0	.016/.021 = na	.001/.014 = na
refusal, moved well		

SITE 91B11-2

surface	.009/.021 = na	.002/.014 = na
refusal, moved well		

JANUARY 16, 1992

TNT CALIBRATION

CONC	ABSORBANCE	rf
10.0 ug/g	.231	.023

RDX CALIBRATION

CONC	ABSORBANCE	rf
10.0 ug/g	.133	.013

TNT SOIL SPIKES

CONC	ABSORBANCE
0.0 ug/g	.000
1.0 ug/g	.021

RDX SOIL SPIKES

CONC	ABSORBANCE
0.0 ug/g	.003
1.0 ug/g	.014

SITE 91B11-3

DEPTH	TNT	RDX
surface	.049/.023 = 2.1 ug/g	.001/.013 = na
2.5 feet	.004/.023 = na	.002/.013 = na

JANUARY 21, 1992

TNT CALIBRATION

CONC	ABSORBANCE	rf
10.0 ug/g	.246	.025

RDX CALIBRATION

CONC	ABSORBANCE	rf
10.0 ug/g	.129	.013

TNT SOIL SPIKES

CONC	ABSORBANCE
0.0 ug/g	.000
1.0 ug/g	.032

RDX SOIL SPIKES

CONC	ABSORBANCE
0.0 ug/g	.002
1.0 ug/g	.011

SITE 91B11-3

DEPTH	TNT	RDX
5.0 feet	.008/.025 = na	.004/.013 = na
7.5 feet	.002/.025 = na	.005/.013 = na
10.0 feet	.002/.025 = na	.004/.013 = na
refusal, moved well		

SITE 91B11-4

surface	.000/.025 = na	.003/.013 = na
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JANUARY 22, 1992

TNT CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .217 rf = .022

TNT SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .002
1.0 ug/g .019

SITE 91B11-4

DEPTH	TNT
2.5 feet	.006/.022 = na
5.0 feet	.002/.022 = na
7.5 feet	.000/.022 = na
10.0 feet	.000/.022 = na
12.5 feet	.016/.022 = na
15.0 feet	.006/.022 = na

RDX CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .126 rf = .013

RDX SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .001
1.0 ug/g .011

RDX

.004/.013 = na
.003/.013 = na
.002/.013 = na
.003/.013 = na
.004/.013 = na
.003/.013 = na

FEBRUARY 1, 1992

TNT CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .217 rf = .022

TNT SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .001
1.0 ug/g .024

SITE 91B11-5

surface	.003/.022 = na
2.5 feet	.003/.022 = na
5.0 feet	.005/.022 = na
7.5 feet	.005/.022 = na
10.0 feet	.000/.022 = na

RDX CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .128 rf = .013

RDX SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .002
1.0 ug/g .019

.007/.013 = na
.008/.013 = na
.004/.013 = na
.008/.013 = na
.005/.013 = na

FEBRUARY 2, 1992

TNT CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .219 rf = .022

TNT SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .002
1.0 ug/g .025

RDX CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .126 rf = .013

RDX SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .003
1.0 ug/g .016

SITE 91B11-5

12.5 feet	.000/.022 = na	.006/.013 = na
15.0 feet	.000/.022 = na	.007/.013 = na

FEBRUARY 8, 1992

TNT CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .216 rf = .022

RDX CALIBRATION TEST
CONC ABSORBANCE
10.0 ug/g .132 rf = .013

TNT SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .002
1.0 ug/g .019

RDX SOIL SPIKES
CONC ABSORBANCE
0.0 ug/g .003
1.0 ug/g .017

SITE 91B13

DEPTH	TNT
surface	.005/.022 = na
2.5 feet	.003/.022 = na
5.0 feet	.001/.022 = na
7.5 feet	.003/.022 = na
10.0 feet	.001/.022 = na
12.5 feet	.000/.022 = na
15.0 feet	.001/.022 = na

RDX
.007/.013 = na
.002/.013 = na
.004/.013 = na
.004/.013 = na
.003/.013 = na
.002/.013 = na
.002/.013 = na

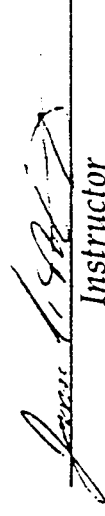
CERTIFICATE OF TRAINING

SPECTRALYTIX ENVIRONMENTAL & ANALYTICAL SERVICES

*This Certificate Stipulates That
On This 20 Day Of December, 1991,*

Daniel Stephens

Has been instructed in the field method for determination of 246 TNT
and RDX in soil using USATHAMA methodology.


Instructor

CERTIFICATE OF TRAINING

SPECTRALYTIX ENVIRONMENTAL & ANALYTICAL SERVICES

This Certificate Stipulates That
On This 30 Day Of December, 1991,

David Pollard

Has been instructed in the field method for determination of 246 TNT
and RDX in soil using USATHAMA methodology.


Instructor

APPENDIX C
DAILY WORK LOGS

9 Dec 91

0700-- Depart Motel

0715-- Arrive Main Gate
to get Badges and vehicle
pass.

0845-- Depart for Jacob
Engineering trailer.

0945-- To front gate to
get vehicle inspection for
access to ammo exclusion area.

1015-- Return to Troops
ENGR. site TEL to wait for.
Barricade to return from whom
Area

1100-- Depart for Motor
to load equipment
in van + back to pick-up
wire + lunch.

1300-- Return to Troops ENGR
TEL.

1430-- Return to Motor - Arr
Personnel TEL + Peridium
and Keranso crew at
1500--

10 Dec 91

0700	Arrive Site	0710	Depart
0815	Depart	0825	Arrive
0845	Arrive	0855	Depart
	0900	0910	Arrive
	0915	0925	Depart
	0930	0940	Arrive
	0945	0955	Depart
	1000	1010	Arrive
	1015	1025	Depart
	1030	1040	Arrive
	1045	1055	Depart
	1100	1110	Arrive
	1115	1125	Depart
	1130	1140	Arrive
	1145	1155	Depart
	1200	1210	Arrive
	1215	1225	Depart
	1230	1240	Arrive
	1245	1255	Depart
	1300	1310	Arrive
	1315	1325	Depart
	1330	1340	Arrive
	1345	1355	Depart
	1400	1410	Arrive
	1415	1425	Depart
	1430	1440	Arrive
	1445	1455	Depart
	1500	1510	Arrive
	1515	1525	Depart
	1530	1540	Arrive
	1545	1555	Depart
	1600	1610	Arrive
	1615	1625	Depart
	1630	1640	Arrive
	1645	1655	Depart
	1700	1710	Arrive
	1715	1725	Depart
	1730	1740	Arrive
	1745	1755	Depart
	1800	1810	Arrive
	1815	1825	Depart
	1830	1840	Arrive
	1845	1855	Depart
	1900	1910	Arrive
	1915	1925	Depart
	1930	1940	Arrive
	1945	1955	Depart
	2000	2010	Arrive
	2015	2025	Depart
	2030	2040	Arrive
	2045	2055	Depart
	2100	2110	Arrive
	2115	2125	Depart
	2130	2140	Arrive
	2145	2155	Depart
	2200	2210	Arrive
	2215	2225	Depart
	2230	2240	Arrive
	2245	2255	Depart
	2300	2310	Arrive
	2315	2325	Depart
	2330	2340	Arrive
	2345	2355	Depart
	2400	2410	Arrive
	2415	2425	Depart
	2430	2440	Arrive
	2445	2455	Depart
	2500	2510	Arrive
	2515	2525	Depart
	2530	2540	Arrive
	2545	2555	Depart
	2600	2610	Arrive
	2615	2625	Depart
	2630	2640	Arrive
	2645	2655	Depart
	2700	2710	Arrive
	2715	2725	Depart
	2730	2740	Arrive
	2745	2755	Depart
	2800	2810	Arrive
	2815	2825	Depart
	2830	2840	Arrive
	2845	2855	Depart
	2900	2910	Arrive
	2915	2925	Depart
	2930	2940	Arrive
	2945	2955	Depart
	3000	3010	Arrive
	3015	3025	Depart
	3030	3040	Arrive
	3045	3055	Depart
	3100	3110	Arrive
	3115	3125	Depart
	3130	3140	Arrive
	3145	3155	Depart
	3200	3210	Arrive
	3215	3225	Depart
	3230	3240	Arrive
	3245	3255	Depart
	3300	3310	Arrive
	3315	3325	Depart
	3330	3340	Arrive
	3345	3355	Depart
	3400	3410	Arrive
	3415	3425	Depart
	3430	3440	Arrive
	3445	3455	Depart
	3500	3510	Arrive
	3515	3525	Depart
	3530	3540	Arrive
	3545	3555	Depart
	3600	3610	Arrive
	3615	3625	Depart
	3630	3640	Arrive
	3645	3655	Depart
	3700	3710	Arrive
	3715	3725	Depart
	3730	3740	Arrive
	3745	3755	Depart
	3800	3810	Arrive
	3815	3825	Depart
	3830	3840	Arrive
	3845	3855	Depart
	3900	3910	Arrive
	3915	3925	Depart
	3930	3940	Arrive
	3945	3955	Depart
	4000	4010	Arrive
	4015	4025	Depart
	4030	4040	Arrive
	4045	4055	Depart
	4100	4110	Arrive
	4115	4125	Depart
	4130	4140	Arrive
	4145	4155	Depart
	4200	4210	Arrive
	4215	4225	Depart
	4230	4240	Arrive
	4245	4255	Depart
	4300	4310	Arrive
	4315	4325	Depart
	4330	4340	Arrive
	4345	4355	Depart
	4400	4410	Arrive
	4415	4425	Depart
	4430	4440	Arrive
	4445	4455	Depart
	4500	4510	Arrive
	4515	4525	Depart
	4530	4540	Arrive
	4545	4555	Depart
	4600	4610	Arrive
	4615	4625	Depart
	4630	4640	Arrive
	4645	4655	Depart
	4700	4710	Arrive
	4715	4725	Depart
	4730	4740	Arrive
	4745	4755	Depart
	4800	4810	Arrive
	4815	4825	Depart
	4830	4840	Arrive
	4845	4855	Depart
	4900	4910	Arrive
	4915	4925	Depart
	4930	4940	Arrive
	4945	4955	Depart
	5000	5010	Arrive
	5015	5025	Depart
	5030	5040	Arrive
	5045	5055	Depart
	5100	5110	Arrive
	5115	5125	Depart
	5130	5140	Arrive
	5145	5155	Depart
	5200	5210	Arrive
	5215	5225	Depart
	5230	5240	Arrive
	5245	5255	Depart
	5300	5310	Arrive
	5315	5325	Depart
	5330	5340	Arrive
	5345	5355	Depart
	5400	5410	Arrive
	5415	5425	Depart
	5430	5440	Arrive
	5445	5455	Depart
	5500	5510	Arrive
	5515	5525	Depart
	5530	5540	Arrive
	5545	5555	Depart
	5600	5610	Arrive
	5615	5625	Depart
	5630	5640	Arrive
	5645	5655	Depart
	5700	5710	Arrive
	5715	5725	Depart
	5730	5740	Arrive
	5745	5755	Depart
	5800	5810	Arrive
	5815	5825	Depart
	5830	5840	Arrive
	5845	5855	Depart
	5900	5910	Arrive
	5915	5925	Depart
	5930	5940	Arrive
	5945	5955	Depart
	6000	6010	Arrive
	6015	6025	Depart
	6030	6040	Arrive
	6045	6055	Depart
	6100	6110	Arrive
	6115	6125	Depart
	6130	6140	Arrive
	6145	6155	Depart
	6200	6210	Arrive
	6215	6225	Depart
	6230	6240	Arrive
	6245	6255	Depart
	6300	6310	Arrive
	6315	6325	Depart
	6330	6340	Arrive
	6345	6355	Depart
	6400	6410	Arrive
	6415	6425	Depart
	6430	6440	Arrive
	6445	6455	Depart
	6500	6510	Arrive
	6515	6525	Depart
	6530	6540	Arrive
	6545	6555	Depart
	6600	6610	Arrive
	6615	6625	Depart
	6630	6640	Arrive
	6645	6655	Depart
	6700	6710	Arrive
	6715	6725	Depart
	6730	6740	Arrive
	6745	6755	Depart
	6800	6810	Arrive
	6815	6825	Depart
	6830	6840	Arrive
	6845	6855	Depart
	6900	6910	Arrive
	6915	6925	Depart
	6930	6940	Arrive
	6945	6955	Depart
	7000	7010	Arrive
	7015	7025	Depart
	7030	7040	Arrive
	7045	7055	Depart
	7100	7110	Arrive
	7115	7125	Depart
	7130	7140	Arrive
	7145	7155	Depart
	7200	7210	Arrive
	7215	7225	Depart
	7230	7240	Arrive
	7245	7255	Depart
	7300	7310	Arrive
	7315	7325	Depart
	7330	7340	Arrive
	7345	7355	Depart
	7400	7410	Arrive
	7415	7425	Depart
	7430	7440	Arrive
	7445	7455	Depart
	7500	7510	Arrive
	7515	7525	Depart
	7530	7540	Arrive
	7545	7555	Depart
	7600	7610	Arrive
	7615	7625	Depart
	7630	7640	Arrive
	7645	7655	Depart
	7700	7710	Arrive
	7715	7725	Depart
	7730	7740	Arrive
	7745	7755	Depart
	7800	7810	Arrive
	7815	7825	Depart
	7830	7840	Arrive
	7845	7855	Depart
	7900	7910	Arrive
	7915	7925	Depart
	7930	7940	Arrive
	7945	7955	Depart
	8000	8010	Arrive
	8015	8025	Depart
	8030	8040	Arrive
	8045	8055	Depart
	8100	8110	Arrive
	8115	8125	Depart
	8130	8140	Arrive
	8145	8155	Depart
	8200	8210	Arrive
	8215	8225	Depart
	8230	8240	Arrive
	8245	8255	Depart
	8300	8310	Arrive
	8315	8325	Depart
	8330	8340	Arrive
	8345	8355	Depart
	8400	8410	Arrive
	8415	8425	Depart
	8430	8440	

FOR 2 LIVE ITEMS
AND REMOVED ALL LOCATED
SCRAP FROM THE AREA.

11 Dec 91

0700 ARRIVE SITE OFFICE
0715 DEPART FOR DEMO
AREA
0745 ARRIVE DEMO AREA
BEGIN LOG OUT AND
CLEARANCE OF 200' X 200'
DOWN GRADIENT AREA
1200 BREAK FOR DINNER
1230 CONTINUE CLEARANCE
1630 DEPART DEMO AREA
FOR OFFICE
LOCATED LARGE AMOUNT
OF OEW INERT SCRAP AND
SEVERAL LIVE LOADS
ORDBAND ITEM WILL
GET EXACT COUNT WHEN
AREA IS COMPLETED

12 Dec 91

07:00 ARRIVE FIELD OFFICE
07:15 DEPART FOR DEMO AREA
07:45 ARRIVE DEMO AREA AND
CONTINUE SWEEP OF DOWN-
GRADIENT AREA
1200 BREAK FOR DINNER
1230 CONTINUE SWEEP OF DOWN-
GRADIENT AREA
16:00 COMPLETE DOWN GRADIENT
AREA
LOCATED APPROX 600+ LBS
OF OEW INERT SCRAP
3 pc 105 mm WP
1 pc 105 mm ?
2 pc 75 mm HE
7 pc 20 mm HE FUZZED
6 pc 275" FLESHITE W/ H
4 pc assorted Band Bookings

13 Dec. 91

- 0700 Arrive Field Office
- 0745 Depart Field Office w/
Jacob's ENCL TASK MGR
for Burning Ground
- 0820 Arrive Burning Ground
and Locate UP AND
DOWN GRADIENT SWEEP
AREAS.
- 0900 Begin Lay out of UP
& DOWN GRADIENT SWEEP
AREAS & CLEARANCE OF
DOWN GRADIENT AREA
- 1200 Break for Dinner
- 1230 Continue Sweep of
DOWN GRADIENT AREA
- 1630 Depart Burning Ground
for Field Office
(DOWN GRADIENT AREA APPROX
1/2 COMPLETE)

14 Dec 91

Check B, Sample
Test Kit B, Burn & Wash
1. Spectro Photometer

- 0700 Arrive Field Office
- 0715 Depart for Burning Ground
- 0745 Arrive Burning Ground
& Continue Sweep of Down
Gradient Area
- 0830 Begin Airborne Aerial Burning
Ground - Reduced Size of
Down Gradient Area & CHANGED
Location of UP Gradient Area
- 1100 - Complete Down Gradient Area
located approx 150 YDS OF
OLD SCARP (INLET). Reduced
to UP GRADIENT AREA AND
Begin New Lay out

1130 BREAK FOR DINNER
1200 BEGIN SWEEP OF BURN
PIT UP GRADIENT AREA

1615 COMPLETE SWEEP OF UP
GRADIENT AREA.
LOCATED APPROX 100 LBS
OF INERT SCRAP
AND 4 ea M23 IGNITERS
(WP) LIVE LOADED.

1630 DEPART BURN AREA FOR
FIELD OFFICE

1700 DEPART FIELD OFFICE SCENE
FOR DAY

15 Dec 91
ARRIVE SIZZ OFFICE

0720 DEPART SITE OFFICE FOR
TNT LAUNDRY SUMP AREA

0740 ARRIVE LAUNDRY TNT SUMP
AREA AND BEGIN ATTEMPT

TO LOCATE SUMP
1030- WIRE MATE TO LOCATE TUNING
BOX AND T-PIPS FOR LAUNCH
SYSTEM (SEE FIGURE)
HOWEVER THE LAUNCH APPAR
TO BE DEMIC PIP &
THIS LOCATION WITH ANY DEMAND
OF CERTAINITY IS NOT POSSIBLE
SHUT DOWN OPERATION AND
RETURNED TO FIELD OFFICE

1100- DEPART FOR MOTOR

1130- ARRIVE MOTOR - CLEAN &
RESTOW MK 20 - WHITES &
SCHONSTEDT - CLEAN VAN -

URGENT SAMPLE LOG FOR
TNT SAMPLING OPERATION.

16 Dec 91

0700 DEPART AT FIELD OFFICE

0715- DEPART FOR BURN AREA
0745- ARRIVE DEMO AREA

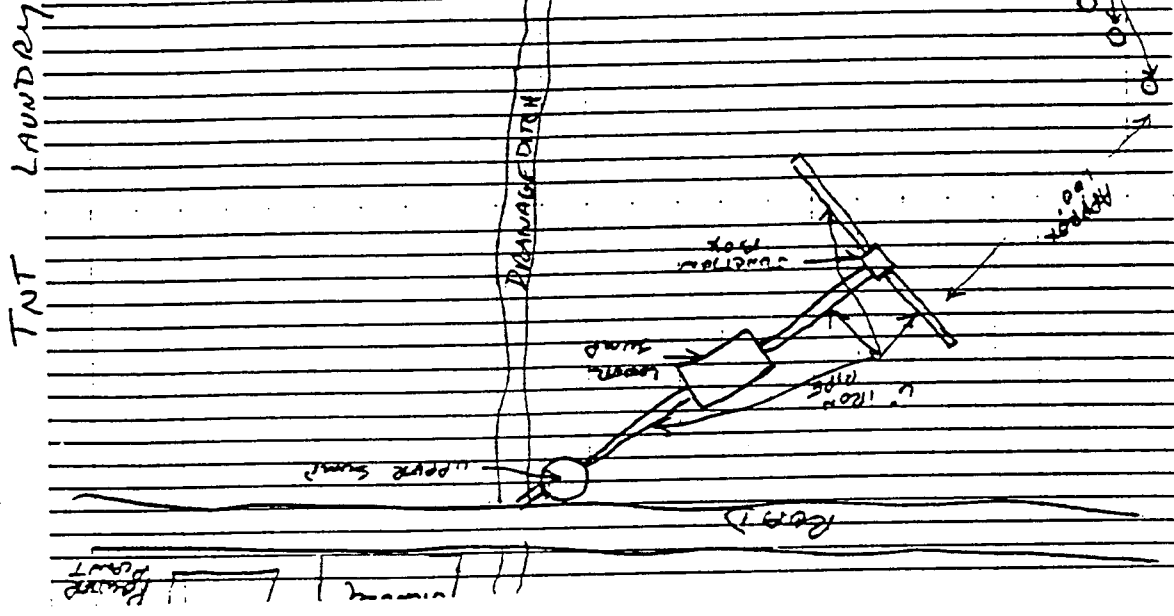
AND BEEN CLEANING
ACCESS ROUTE TO DOWN-
GRADIENT AREA.
1200 - BREAK FOR DINNER
1230 - CONTINUE WITH CLEANING
OF ACCESS ROUTE

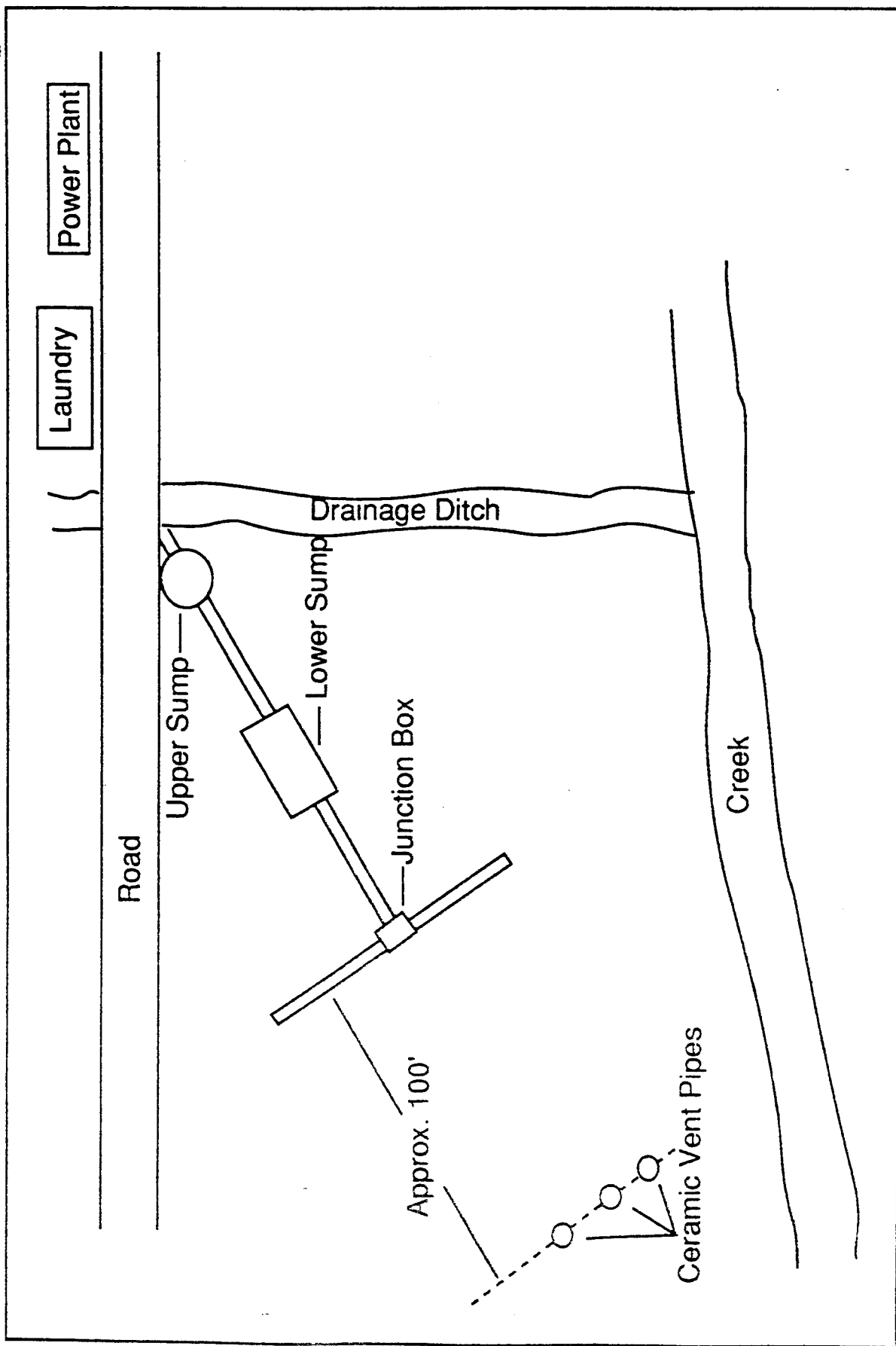
0900 - 0100H DEPART FOR
TOWN TO GET PERMITS AND
LOCATE PERMANENT CANAL
ASSISTANT.

1400 - 0100H RETURN TO DEMO
AREA - PERMITS HAS NOT
ARRIVED AND NO ASSISTANT
AVAILABLE

1630 - DEPART DEMO AREA
FOR FIELD OFFICE

1700 - DEPART FOR THE DAY





TNT LAUNDRY

UXB International, Inc.
14800 Conference Center Drive
Suite 100
Chantilly, Virginia 22021-3806

ATTN: Tom Yancey

SUBJECT: Daily Log of RDX and TNT Soil Contamination Tests at the
Anniston Army Depot

GENERAL

Field tests following the USATHAMA approved methods were conducted to determine the soil concentrations of TNT and RDX. The tests were conducted to ensure that monitoring well drilling operations would not encounter dangerous levels of explosives. Explosive levels of 10% or greater are considered hazardous.

Explosive contamination testing was conducted at three prospective well sites located in the vicinity of the TNT wash out facility. Tests were conducted on the surface and at 2.5 foot intervals to a depth of 15 feet. Tests were also conducted on two sites at the demolition range. Only surface tests were required in the demolition range area.

TESTING CERTIFICATION

TNT and RDX soil contamination tests were conducted in accordance with the Method Documentation USATHAMA (1987) Format.

SAFETY

No incidents or accidents occurred during the explosive field testing operations. Personnel wore eye protection and gloves during testing operations and the field laboratory was kept well ventilated.

MOBILIZATION (January 2, 1992)

UXB International personnel traveled to Oxford, Alabama on January 2, 1992. From January 3th to the 7th UXB personnel purchased equipment and chemicals, procured rental equipment and assembled a field laboratory in a rented, high cube truck.

DEMOBILIZATION (February 9 - 10, 1992)

UXB personnel cleaned and packed equipment, returned rental equipment and departed the Anniston Army Depot area.

OPERATIONS

Field testing operations were conducted in accordance with the Method Documentation USATHAMA (1987) Format, Certification, Field Method for the Determination of 246TNT and RDX in Soil.

RESULTS

The certified reporting limits for the field testing operations were:

RDX not less than 1.4 ug/g and not greater than 20 ug/g without diluting.

TNT not less than 1.11 ug/g and not greater than 22.3 ug/g without diluting.

UXB tested no soil sample which required dilution. Most soil sample test results were less than the lower certified reporting limit. See Appendix B for specific site test results.

UXB International, Inc.
14800 Conference Center Drive
Suite 100
Chantilly, Virginia 22021-3806

24 February 1992

Re. After Action Report; Anniston Army Depot, Anniston, Alabama,
Phase III, UXB 505.01, 14-20 Feb 92.

To: Mr. Tom Yancey, Project Manager

The purpose of this phase of field operations was to provide down hole monitoring and detection to support Jacobs Engineering and ATEC Associates during drilling operations required to install ground water sampling wells.

Areas of interest were explosives and propellant burning area and ordnance demolition areas located on Anniston Army Depot, Anniston, Alabama. Selected sites were established and surface and subsurface sweeps conducted by UXB personnel in December 1991. Two drilling locations were identified in each area, one up gradient and one down gradient. Access routes, equipment and decon areas were visually swept during this phase of the operation.

The operation was overseen by Mr. Bruce Kirchner, Jacobs Engineering Group, Project Manager.

Site visitors were: Mr. Jerald Broughton, USATHAMA, Vicksburg, MS.
14-18 Feb 92
Ms. Vivian Graham, USATHAMA, Aberdeen, MD.
19 Feb 92
Ms. Leslie Ware, Anniston Army Depot,
Environmental Management Division, 19 Feb 92
Mr. Terry Briggs, Jacobs Engineering Group,
Corporate Health and Safety Officer, 17-19
Feb 92

SUMMARY OF OPERATION-14 Feb 92, 0530-1730

Travel to Anniston Army Depot from Huntsville, AL. Rental van inspected and registered for access to installation and work areas. Reported in to Jacobs office. Escorted Mr. Gardner, Jacobs, and Mr. Broughton, USATHAMA, to burning area and reviewed the sweeps completed in the selected locations in December. Identified the access routes and site locations staked out previously. Moved to demolition area and conducted the same tour. Met with drilling crews and briefed them on hazards associated with the areas. Escorted crew into the down gradient site in the burning area, visually reswept the areas needed for equipment and decon sites. Standing by on site for second drilling crew to be escorted to up gradient site. Second crew arrived and were escorted to site, decision was made to set up drill rig next morning. Returned to office, verified start time for next days operations, returned to motel.

SUMMARY OF OPERATION-15 Feb 92, 0630-1030

Travel to site, met drilling crew, drizzling rain with forecast to increase. Drill crew sunk rig in soft ground while attempting to move onto drill site. Raining harder with thunder storms moving in on location. Drill rig recovered and moved to more solid area, decision made by Jacobs and USATHAMA representatives to relocate drilling site. Drill rig moved on site. Decision made to suspend operations for safety reasons due to weather. Returned to office for start time for next days operations, returned to motel.

SUMMARY OF OPERATION-16 Feb 92, 0630-1230

Travel to site, both drilling crews to begin operations. Up gradient crew first to 4 foot level, no indications of any item to preclude operations detected with the MK-26. Second drill crew to 4 foot mark, same results at that location. Core sample at first site pulled, sample revealed undisturbed soils below the 4 foot level, further down hole monitoring waived by USATHAMA due to sample and land use. Second drill crew pulling core sampler, results same, down hole again waived by USATHAMA. Standing by on site for requirement to relocate drill sites. Both wells at water level by 18-23 feet. No further UXB support required for this days operations. Returned to office, drill crews to complete wells next day and decon rigs, no UXB support required for next days operations. Advised to call office for start up time for next drilling. Returned to motel.

SUMMARY OF OPERATION-17 Feb 92, No time Logged

Contacted Jacobs office 1645, drilling operation to resume next morning.

SUMMARY OF OPERATION-18 Feb 92, 0630-1730

Travel to site, drilling to start at up gradient site of the ordnance demolition area, second rig not available for operations at this time. Down hole monitor revealed no indications of any items to preclude continued drilling operations. Soil sampler shows undisturbed soils on 8 foot core, further down hole monitoring waived by USATHAMA on site. Standing by on site for requirement to relocate drilling site. Second drilling crew arrived with all-terrain rig to be used in well located at furthest end of demolition area. Escorted crew into site on foot, advised them of potential hazards and visually swept location for rig to be set up and equipment and decon pads to be established. Equipment and rig to be moved on site today, drilling on site tomorrow to start after site visitors arrive to observe operation. Drilling complete on current well, no further UXB support required. Returned to office, briefed by Mr. Kirchner on next days visitors, verified start time on site, returned to motel.

SUMMARY OF OPERATION-19 Feb 92, 0630-1630

Travel to office, check status of previous days well, over boring required to set well, all completed. Verified visitors to be on drilling site and checked start time. Travel to site, stand by to escort visitors and monitor drill operation set up. Visitors arrived and requested photos of MK-26 set up and operated for surface sweep. Broke down detector from bore hole mode to set up for sweep and demonstrated operation. Reconfigured back to bore hole mode and escorted visitors to drill site. Provided briefing on previous area surface and subsurface sweep operation and site hazard briefing. Drilling to 4 foot level and auger removed for down hole, no reading to indicate requirement to relocate. Drilling resumed to 8 foot and monitoring was repeated. Core sample could not definitely verify area not disturbed at 8 foot level. Core sampler pulled at 12 feet. Soils at 10-12 foot depth not disturbed, further down hole checks waived by Jacobs and USATHAMA. Standing by on site for possible requirement to relocate drill site. Visitors departed. Water at 20 feet. No further requirement for UXB. Returned to office, advised to check in next morning to verify well status. Returned to motel.

SUMMARY OF OPERATION-20 Feb 92, 0700-1500

Travel to office, verified well status, good well. Out brief with Mr. Kirchner, Jacobs Project Manager. Contacted UXB, Mr. Yancey not available until after 1145, advised office that project was complete and would contact Mr. Yancey from Huntsville around 1300. Returned to motel, cleaned and packed equipment and checked out. Stopped at South Trust Bank and collected wire transfer funds and departed to Huntsville. Arrive Huntsville, contacted Mr. Yancey, advised on project status. He requested immediate shipment of MK-26 via Delta Airlines to Baltimore. Inspected and sealed unit and transported to airport for shipment. Contacted Mr. Yancey with flight number and arrival time. Returned to town, had rental van washed and fuelled for return to Avis. Rental turned in, accounting ledger completed and closed out, mission completed.

OBSERVATIONS/COMMENTS

Personnel, supplies and equipment adequate. Site plans and briefing excellent. Coordination with prime contractor and other subcontractors good, operating report good. No accidents or injuries involving any UXB personnel or as the result of any UXB operation.


DANIEL R. ISBELL

TECHNOS

FINAL REPORT

Geophysical Surveys
at
Anniston Army Depot
Anniston, Alabama

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Figure 10a. Site map of SWMU 26

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Figure 11a. Site Map of SWMU 27

Figure 11b. Survey Grid Map of SWMU 27

Figure 11c. EM Conductivity Contour Map of SWMU 27

PURPOSE AND SCOPE

This report provides documentation of the geophysical survey work done by Technos, Inc. under subcontract to Jacobs Engineering Group, Inc. Monitoring Program at Anniston Army Depot (Figure 1). The surface geophysical surveys provided by Technos include the electromagnetic (EM31), ground penetrating radar (radar), and magnetic methods.

_____ sites were surveyed, which included:

- o _____ Valve Disposal Pit
- o _____ Chemical Waste Burial Pit
- o SWMU 8 - Acid Disposal Pit
- o _____ Calcium Hypochlorite Burial Pit
- o _____ Acid Chemical Waste Pit
- o SWMU 16 - Burning Ground
- o SWMU 17 - Demolition Pit
- o SWMU 26 - North TNT Burial Pit
- o SWMU 27 - South TNT Burial Pit

Coordination with the various team members (Jacobs Engineering Group, Inc., UXB and Bailey Engineering, surveyors) was a necessary part of this project. In addition, security clearance, site safety training, and blood tests were also required. Technos, Inc. also provided brush clearance of survey lines and survey grid layout at some sites.

Access to some sites were limited due to being restricted areas. Sites 8, 16, 17, 26 and 27 were located within the security area which closed at 5:00 PM each day.

Access at the burn area (Site 16) were limited when materials were being burned. Site 8 was located within the Chemical Limited Area and required special safety training and blood tests. Access to site 8 also required a security guard escort at all times.

A total of 20 days were spent on site providing geophysical services at these nine sites.

TECHNICAL APPROACH

Three surface geophysical methods were available on-site for this work; electromagnetics (EM) ground penetrating radar (Radar), and magnetometer.

ELECTROMAGNETICS (EM)

General

The electromagnetic (EM) method measures electrical conductivity of subsurface conductivity in millimhos/meter (millisiemens/meter). Electrical conductivity is a function of the type of soil and rock, its porosity and the fluids which fill the pore spaces.

The method is applicable to the assessment of natural hydrogeologic conditions. Natural variations in subsurface conductivity may be caused by changes in basic soil or rock types, thickness of soil and rock layers, moisture content, and depth to water table. The specific conductance of the pore fluids often dominates the measurement. Because the specific conductance of fluids in pore spaces can dominate the measurements, detection and mapping of contaminant plumes can often be accomplished using the EM method. In addition to evaluation of natural hydrogeologic conditions and mapping of contaminant plumes, some of the electromagnetic instrumentation can be used to locate trench boundaries, buried wastes and drum, and metallic utility lines.

A further detailed description of the EM method is included in Appendix A.

Site Specific

The EM method was the primary geophysical tool used for this project and was used to assess general subsurface soil conditions, locate boundaries of burial or disposal pits and evaluate conditions at drill sites.

An EM31 was used in this work. The EM31 instrument measures to a depth of about 18 feet based upon criteria defined by the manufacture. The response of the EM31 is non-linear, and asymptotic with depth. Seventy percent of the response is coming from the upper 18 feet. When the instrument is carried at hip height, values are reduced by 12% (McNeill, 1980; Appendix A). If highly conductive conditions occur deeper than 18 feet, they can significantly add to the conductivity values measured.

The EM was used as the primary site investigation tool because it provides a rapid means of measurement. With lines spaced 10 feet apart it provides nearly 100% site coverage. It also provides a first approximation for assessing uncontaminated background conditions versus those with elevated specific conductance (or total dissolved solids) due to the presence of inorganics and provides a means of assessing the presence of buried metals.

An EM31 with a Digital Data Acquisition System (DAS) was used for this work. Samples were obtained at a 1 second interval as the EM31 was walked along the survey line. This method of data acquisition produces essentially continuous EM data. Marks were placed upon the EM data as each station mark was passed. The process of marking survey grid locations on the data at intervals eliminates any cumulative positioning errors along each survey line.

Both in-phase (metal) and out-of-phase (conductivity) data was recorded. The digital data was transferred from the DAS to a lap-top field computer and the data was contoured using Surfer.

The default parameters within the "Surfer" program were found to be satisfactory for use in the gridding and contouring routine. The EM contour data was used to provide the initial assessment of site conditions and to plan any further work. EM contour maps of each site are included.

GROUND PENETRATING RADAR

General

Ground penetrating radar uses high frequency electromagnetic waves (from less than 100 MHz to slightly more than 1,000 MHz) to acquire subsurface information. Energy is radiated downward into the ground from a transmitter and is reflected back to a receiving antenna. Reflections of the radar wave occur whenever there is a change in the dielectric constant and/or electrical conductivity between two materials. Changes in conductivity and in dielectric properties are associated with natural geologic and/or hydrogeologic conditions and buried utilities and wastes. The reflected signals are recorded and produce a continuous cross-section or profile of shallow subsurface conditions. The picture-like radar record allows for preliminary field analysis of radar data.

Depth of penetration of the radar wave is highly site-specific. Penetration depth is limited by attenuation due to the higher electrical conductivity, dielectric losses and/or scattering of subsurface materials. Generally, radar penetration is greater in coarser, dry, sandy soils or massive rock, and less penetration is obtained in wet, fine grained

clayey (conductive) soils. While radar penetration in soil and rock to more than 100 feet has been reported, penetration of 15 to 30 feet is more typical. In silts and clays, penetration may be limited to a few feet or less.

Radar has the highest resolution of all of the surface geophysical methods. Vertical resolution of radar data can range from less than an inch to several feet depending upon the depth and the electromagnetic wave frequency used.

A further description of the radar method is included in Appendix B.

Site Specific

Radar was use on this project to assess general subsurface soil conditions and locate boundaries of burial or disposal pits.

A GSSI SIR System 8 was used to acquire radar data with an 80 MHz antenna. The radar antenna was towed by hand over the site. Data was recorded real-time on a graphic recorder. Marks were placed upon the radar record as each station mark was passed. The process of marking survey grid locations on the data at intervals eliminates any cumulative positioning errors along each survey line.

The radar system range was set at 200 nanoseconds, providing a maximum depth of 40 feet (using 5 nanoseconds/ft two-way travel-time). The use of 5 nanoseconds/ft is an approximation in converting the time scale to depth, since depth calibration to on-site soils was not made. Based upon a travel time of 5 nanoseconds/foot, the maximum depth of radar penetration on site was about 25 feet (Figure 7d). The minimum depth of radar penetration on site was about 6 feet.

Interpretation of the radar data was done from the field records. Profile data from selected radar lines (at sites where radar was run) are included to illustrate site conditions.

MAGNETOMETER

General

A magnetometer measures the intensity of the earth's magnetic field. The primary application of magnetic measurements at hazardous waste sites is in detecting buried drums, tanks, pipes, and other ferrous metals. A magnetometer will only respond to ferrous metals (iron and steel) and will not detect nonferrous metals.

Gradient measurements have a distinct advantage over total field measurements. They are insensitive to natural changes in the earth's magnetic field and minimize most cultural effects. Because the response of a gradiometer is the difference of two total field measurements, it responds only to the local gradient. Under ideal conditions, a single drum can be readily detected at depths up to about 10 feet with a gradient magnetometer.

A further description of the magnetometer method is included in Appendix C.

Site Specific

A Magnetometer was used on this project to assist in locating boundaries of burial or disposal pits and in interpretation of EM anomalies.

A Forester Ferex 4.021 Fluxgate gradiometer was used for the magnetometer surveys (similar to the one used by UXB for their work). The magnetometer range was set to ± 30 full scale deflection which has been found to be a reasonable sensitivity for such work. This scale provides an output of ± 228 gammas/foot.

The survey was run with the probe 3 feet off the ground to minimize the influence of small ferrous scrap metals often found at the surface. Data was recorded on an analog strip chart recorder so that a real time record was available as the survey was run. Marks were placed upon the strip-chart record as each station mark was passed. The process of marking survey grid locations on the data at intervals eliminates any cumulative errors along each survey line.

Profile data from selected radar lines (at sites where mag was run) are included to illustrate site conditions.

GENERAL SEQUENCE OF WORK

The team members for this specific work were Technos, Inc. for surface geophysics, UXB for unexploded ordnance clearance, and Bailey Engineering for brushing and survey grid layout. Bruce Kirchner of Jacobs Engineering Group, Inc., provided on site direction.

If a site required unexploded ordinance clearance, the work plan specified that UXB would clear the site first, then the surveyors would layout a survey grid for the geophysical work and then Technos would carry out the geophysical survey(s). At sites that did not require unexploded ordinance clearance, the surveyors would layout

a survey grid for the geophysical work and then Technos would carry out the geophysical survey(s). However, in a number of cases, Technos provided brush clearance and laid out the survey grid because the surveyors were behind schedule.

In all cases an EM31 conductivity survey was run before any radar or magnetometer surveys. Radar and/or magnetometer was then selectively used to assess boundaries of disposal and disturbed soil conditions or the presence of buried ferrous metals.

SURVEY GRIDS

At sites SWMU [redacted], 26, 27, 8, 16 upgradient and downgradient, 17 downgradient, the survey grids consisted of 10-foot line spacing with 20-foot intervals marked along each survey line.

At sites SWMU [redacted], [redacted], and 17 upgradient, the survey grid was flagged on every other line (20-foot line spacing) but geophysical data was obtained at 10-foot line spacing by interpolation.

[redacted] the survey grid had a 30-foot line spacing with 30-foot intervals marked along each line. Geophysical survey lines were interpolated and run at 15-foot line spacing.

The survey grid was oriented according to site geometry with survey lines being parallel or perpendicular to a fence, road or other cultural feature when possible. In some cases, the UXB corner stakes were used to orient the survey grid for geophysical work.

The origin (0,0) of the survey grid was generally located at the southwest corner of each grid. The (0,0) station was marked with a flag, surveyors tape, and paint so that it can be readily relocated. The (0,0) station was also referenced to some cultural feature when possible. We recommend that Jacobs Engineering Group, Inc. have the surveyors locate the 0,0 station at each site so that the survey grid can be re-established at a later date if necessary.

Geophysical surveys were run along each survey line (10 or 15 feet apart). The survey lines were run in a direction such that they would be perpendicular to a pit if an elongated pit was suspected. No perpendicular survey lines were run as a routine part of each survey but selected lines were run at some sites to aid interpretation of the data.

The EM31 measurements were started about 10 feet before the survey grid and extended about 10 feet beyond the survey grid for contouring purposes. Therefore, the survey grid maps and EM contour maps of the EM31 data extend slightly beyond the survey grid on both ends.

The survey grid dimensions are given for each site in the text. The first number is the baseline length and the second number is the line length of the survey lines (i.e. 130 by 80 feet).

SITE DESCRIPTIONS AND RESULTS

The following are the descriptions of each site along with the surface geophysical results. Figure 2 shows the map of the Anniston Depot with the general location of the individual sites. Table 1 lists the sites along with the objective(s) of the geophysical work and summarizes the work done at each site. Table 2 shows the maximum range and typical electrical conductivities at each site as well as off-site background conductivities to aid in assessing background versus contaminated conditions.

Site maps (from the Jacobs Engineering Group Work Plan) are included for each site. Site maps provided in the Jacobs Engineering Group Work Plan are not necessarily to scale. Site locations and orientation on these maps may be approximate. A survey grid map and an EM conductivity contour map are also included for each site. Profile data from selected radar and magnetometer lines (at sites where they were run) are included to illustrate site conditions.

~~ANNISTON DEPOT - INDUSTRIAL AREA~~

~~Site Description~~

~~This site is located in the Industrial Area of the Depot (Figure 3a). The site is described as a rectangular pit approximately 50 feet by 110 feet, where sodium-filled engine valves were disposed of. It is a heavily wooded area with some thick cudzoo growth at the northern edge of the site.~~

~~The site was marked by four warning signs and there were obvious indications of trenching within the area marked by the signs. These areas of trenching contained water from recent rains. The surface contained scattered metal and trash debris.~~

Summary

The site is characterized by generally elevated conductivities across the entire site. This is supported by the reconnaissance EM measurements made indicating lower conductivities off-site. It is likely that this entire area has been filled and built-up using construction debris and high conductivity fill material.

An obvious linear trend of EM conductivity anomalies is seen at this site. A burial pit probably lies along the axis of the EM anomalies. It may extend up to 200 feet wide and 540 feet long and is generally supported by radar and to a lesser extent by magnetic data. The outline of this pit is shown in Figure 4c.

SWMU 8 - ACID DISPOSAL PIT

Site Description

This site is located in the northeast section of the Depot in a restricted Chemical Limited Access area, between C and G blocks (Figure 5a). This area has been identified as a disposal area for acids. It is reported to contain heavy metals, explosive compounds, volatile and semi-volatile organics possibly in-cased in a concrete vault.

Objective of Geophysical Work

The objective at this site was to map the boundaries of the pit or concrete vault. An EM31 survey was run to meet these objectives.

The location of this site was not obvious and considerable time was spent looking for the site. A wooded area west and north of storage igloo #C-809 was determined to be the most likely area identified on Figure 5a based upon the roads and fences in the

area. This site is identified as 8A. A north-south creek with steep banks dissects this site, which caused a 30 foot gap in the data.

Since there was considerable uncertainty in the location of the disposal area a second large area to the north of igloo #C-809 was also surveyed at Bruce Kirchner's request. This site was identified as 8B (identified by B. Kirchner based upon USATHAMA reports).

Reconnaissance EM31 and magnetometer surveys were run over areas 8A and 8B as well as around the perimeter of the bauxite ore pile to the west. The purpose of this reconnaissance information was to check these areas prior to acquiring detail data. No obvious EM or magnetometer anomalies were found. However, sites 8A and 8B were surveyed as identified.

Survey Grids

SITE 8A (JACOBS ENGINEERING GROUP, INC. WORK PLAN SITE)

A 200-foot by 320-foot survey grid was set up by the surveying crew. The survey grid had 10-foot line spacings and was marked at 20-foot intervals along each survey line. The origin (0,0) is located in the southwest corner of the grid. The survey lines were run in an approximately north to south direction (Figure 5b). There is a 30 foot gap which was not surveyed, because of a creek running south to north, through the site.

SITE 8B

An 420 foot by 180 foot survey grid was set up at site B by the surveyors with the help of Technos and Bruce Kirchner. The survey line had a 10-foot line spacing and 20-foot intervals along each survey line. The origin (0, 0) is located in the southwest corner of the grid. The survey lines were run in a east to west direction (Figure 5c).

Results

EM - AREA 8A

The EM conductivity contour map (Figure 5d) shows typical conductivity values of about 4.8 to 5.5 mmhos/meter across the site, (background conductivity values of less than 10 mmhos/m are found throughout the Anniston Army Depot). Two very subtle features are identified in the EM data. A linear feature of slightly lower conductivity extends from the western border toward the center of the site between Lines 0 to 70 and centered at about Station 130. Another small localized area of low conductivity is located along Line 200 at Station 295.

These areas are not associated with an obvious in-phase response. Therefore they are likely natural changes in conductivity.

EM - AREA 8B

The EM conductivity contour map (Figure 5e) shows typical conductivity values of about 5 to 7 mmhos/meter across the site, (background conductivity values of less than 10 mmhos/m are found throughout the Anniston Army Depot). There are two features identified in the conductivity map at this site. A very distinct linear trend running east to west across the site along Line 370. This feature is characterized by a change in conductivity from about 6 mmhos/m to the south to about 9 mmhos/m to the north. The conductivities are uniform on both sides of this feature. There are no obvious surface features which can account for this feature.

The second feature is a higher conductivity zone in the northeast corner of the site. The center of this high conductivity area is located between Lines 290 and 430 and between Station 160 to 190. It should be noted that survey lines in this area stopped

at the base of the berm which rises to a paved road. Therefore, this high conductivity does not appear to be associated with the road.

Summary

Based on the conductivity contour maps in Figures 5D and 5E, it appears that there is no burial pit or cement vault within the two areas surveyed. The two anomalous features seen at site 8A are very subtle in nature and may likely be due to natural variations in conductivity. The two anomalous features seen at site 8B are distinct. Since the linear trend is so obvious it appears to be man-made, however, the exact cause of this feature is unknown.

UXB did not do any UXO clearance at this site.

~~SWMU 9 - CALCIUM HYPOCHLORITE BURIAL PIT~~

Site Description

~~This site is located approximately 700 feet west of the sewage treatment plant and approximately 500 feet southwest of the vehicle test track (Figure 6a). The site is bounded on the west by a chain-link fence and on the east by a storage area with tanks and other equipment. This site was totally covered with thick cudzoo growth. A bulldozer was brought in to clear the site before gridding was done. The surface soils at this site were very soft and wet.~~

~~This site is thought to consist of a pit which contains approximately 40,000 pounds of calcium hypochlorite. In addition, nearby SWMUs have contaminated soils and groundwater containing solvents, sludges and metals.~~

reasonable agreement between the shape of the pit boundaries defined by the EM and radar data along the four radar lines.

MAGNETOMETER

An example of the magnetic data is shown in Figure 7e. In general the magnetic data shows the presence of considerable ferrous metal over the area surveyed. However, between Lines 0 and 40 the magnetic data indicates an area with very few ferrous targets. There is a concentration of magnetic anomalies within and surrounding the pit defined by the EM data.

Summary

A clear pit is defined by the 10 mmhos/m conductivity contour. Selected radar data and magnetic data also indicate a pit, but with slightly larger boundaries than that shown by the EM data.

UXB did not do any UXO clearance at this site.

SWMU 16 - BURNING GROUND

Site Description

This site is located about one kilometer north of Block L (Figure 8a). This location is about 1 kilometer north and 1.3 kilometers west of the TNT Washout Facility. It consists of an open, flat area within a small valley. Several burning trays are evenly spaced and situated within the Burning Ground Area. A storage area is located at the north-end and a large metal cage is located at the south-end of the burning ground area.

Objective of Geophysical Work

The objectives at this site was to survey 2 proposed drill sites (one upgradient and one downgradient of the actual pit area). An EM31 survey was run to meet these objectives.

Survey Grids

UPGRADIENT SITE 16U

A 190-foot by 140-foot survey grid was set up by the Technos field crew. The survey grid had 10-foot line spacings and was marked at 20-foot intervals along each survey line. The survey grid origin (0,0) is located in the southwest corner of the grid. The survey lines were run in an approximately north to south direction (Figure 8b).

A creek along the western edge of the grid runs in a northwesterly direction, cutting short some of the grid line on the west side.

DOWNGRADIENT SITE 16D

A 40-foot x 200-foot survey grid was set up by Technos with a 10-foot line spacing and 20-foot intervals along each survey line. The survey grid origin (0,0) is located in the southwest corner of the grid. The survey lines were run in a north to south direction (Figure 8c).

A creek runs a few feet from the western boundary of the grid. The lines west of the dirt road were run along a slightly wooded area.

Results

UPGRADIENT SITE 16U

The EM conductivity contour map of the upgradient area (Figure 8d) shows typical conductivity values of about 6 to 9 mmhos/meter, (background conductivity values of less than 10 mmhos/m are found throughout the Anniston Army Depot). There is a uniform increase in conductivities to the northwest. One EM anomaly was identified in this data centered along Line 110 at about Station 100. This anomaly also has an in-phase response and is likely due to buried metal.

This site was surveyed and cleared by UXB using a magnetometer.

DOWNGRADIENT SITE 16D

The EM conductivity contour map of the downgradient area (Figure 8e) shows typical conductivity values of about 10 to 11 mmhos/meter, (background conductivity values of less than 10 mmhos/m are found throughout the Anniston Army Depot). Conductivity values are generally elevated at this site with a slight increase in conductivities in the southwestern corner of the site. These generally higher conductivities across the site may be associated with the drainage ditch along the eastern edge of the site and the creek along the western edge of the site. The higher conductivities in the southwest corner appear to be directly associated with a ditch which runs across that area. No unusual conditions are seen in the EM data.

This site was surveyed and cleared by UXB using a magnetometer.

SWMU 17 - DEMOLITION PIT

Site Description

This site is located 1.3 kilometers due north of the burning ground (SWMU 16) in the northwest section of the depot (Figure 9a). This area has been identified as a demolition pit. This site is said to contain heavy metals, explosive compounds and organics.

Objective of Geophysical Work

The objectives at this site was to survey 2 proposed drill sites prior to drilling (one upgradient and one downgradient of the actual pit area). An EM31 survey was run to meet these objectives.

Survey Grids

UPGRADIENT SITE 17U

A 80-foot by 180-foot survey grid was set up by the Technos field crew. The survey grid had 20-foot line spacings and was marked at 20-foot intervals along each survey line. Geophysical data was obtained at 10-foot line spacing by interpolation. The upgradient survey grid origin (0,0) is located in the southwest corner of the grid. The survey lines were run in an approximately north to south direction (Figure 9b).

This site is bounded on the west by a paved road and on the east by a steep hill. At the northern boundary of the site is a storage area containing pallets and metal containers.

DOWNGRADIENT SITE 17D

A 110-foot x 200-foot survey grid was set up by the surveyors and Technos. The grid consisted of 10-foot line spacing and 20-foot intervals along each line. The survey

grid origin (0,0) is located in the southwest corner of the grid. The survey lines were run in a north to south direction (Figure 9c).

This is a wooded site with heavy undergrowth, which is bounded on the northwest by a creek and on the southeast by a cleared area.

Results

UPGRADIENT SITE 17U

The EM conductivity contour map of the upgradient area (Figure 9d) shows typical conductivity values of about 4 to 6 mmhos/meter. Background conductivity values of less than 10 mmhos/m are found throughout Anniston Army Depot. In general, the values are quite low over most of the site with no unusual features except in the extreme northwestern and northeastern portion of the site. In the northwestern portion of the site along Line 0 at Station 190, a small area of high conductivity occurs. This feature is not associated with an in-phase response. In the northeastern portion of the site along Line 90 at Station 180, a small area of low conductivity occurs. This feature is associated with an in-phase response indicating the presence of metal. Both of these targets may be due to the storage area along the northern boundary of this site.

This site was survey and cleared by UXB using a magnetometer. Some unexploded ordinance was found by UXB at this site.

DOWNGRADIENT SITE 17D

The EM conductivity contour map of the downgradient area (Figure 9e) shows typical conductivity values of about 4 to 6 mmhos/meter, (background conductivity values of less than 10 mmhos/m are found throughout the Anniston Army Depot). Conductivity

values generally increase toward the north and then become lower, especially in the northeastern portion of the site. No obvious EM anomalies are identified in this area.

Two in-phase anomalies have been detected. One along Line 60 at about Station 90 and another at Line 90 at about Station 190. The latter feature correlates with a local area of lower conductivities.

This site was surveyed and cleared by UXB using a magnetometer. Numerous unexploded ordnance was found by UXB at this site.

SWMU 26 - NORTH TNT BURIAL PIT

Site Description

This site is located in the north-central section of the depot, about 0.5 kilometer north of the west end of G Block (Figure 10a). This site is marked by four warning signs. A dirt road runs east to west along the southern boundary of the site. Short pine trees occupy the center of the site. It is bounded and contains tall pine trees on the north, east and west.

This area has been identified as the North TNT burial pit. The pit is said to contain heavy metals, explosive or ordnance compounds, volatile and semi-volatile organics.

Objective of Geophysical Work

The objective at this site was to map pit boundaries. An EM31 survey was run to meet this objective. A single radar line was also run at this site.

Survey Grid

A 200-foot by 200-foot survey grid was set up by the surveying crew. The survey grid had 10-foot line spacings and was marked at 20-foot intervals along each survey line. The origin (0,0) is located in the southwest corner of the grid. The survey lines were run in an approximately north to south direction (Figure 10b).

Results

EM

The EM conductivity contour map (Figure 10c) shows typical conductivity values of about 9 to 12 mmhos/meter, (background conductivity values of less than 10 mmhos/m are found throughout the Anniston Army Depot). In general the conductivity values are quite uniform over this site, increasing to the northeast. A distinct low conductivity anomaly occurs along Line 100 and 110 between about Stations 40 to 90. This feature is associated with a large in-phase response between about Station 40 to 120.

RADAR

A single radar traverse was run along Line 110 in order to cross over the EM anomaly. The radar data (Figure 10d) shows the boundary of the pit from about Station 40 to 90, which agrees quite well with the EM contour data in Figure 10c.

Summary

A clear anomaly is defined by the EM conductivity, EM in-phase, and radar data. The pit is bounded by Lines 90 to 120 and Stations 40 to 120.

UXB did not do UXO clearance at this site.

SWMU 27 - SOUTH TNT BURIAL PIT

Site Description

This site is located in the north-central section of the depot, about 0.5 kilometer north of the west end of G Block (Figure 11a). This site is marked by four metal warning signs. A dirt road runs along the eastern boundary of the site and a trail on the northern boundary.

This area has been identified as the South TNT burial pit. The pit is said to contain heavy metals, explosive or ordnance compounds, volatile and semi-volatile organics.

Objective of Geophysical Work

The objective at this site was to map pit boundaries. An EM31 survey was run to meet this objective.

Survey Grid

An 150-foot by 160-foot survey grid was set up by surveying crew. The survey grid had 10-foot line spacing and was marked at 20-foot intervals along each survey line. The origin (0,0) is located in the southwest corner of the grid. The survey lines were run in an approximately east to west direction (Figure 11b).

Results

The EM conductivity contour map (Figure 11c) shows typical conductivity values around 8 mmhos/meter, (background conductivity values of less than 10 mmhos/m are found throughout the Anniston Army Depot). The conductivity values throughout the site are quite uniform. A distinct low conductivity area occurs toward the center of the site, consisting of two separate anomalies. One anomaly is centered along Line

80 at about Station 90. The other anomaly is centered along Line 90 at about Station 130. Both of these features are also associated with a large in-phase response indicating the presence of buried metal.

Summary

A clear anomaly is defined by the EM conductivity and the EM in-phase data. The pit is bounded by Lines 70 to 100 and Stations 80 to 140. It is not clear whether the two anomalies are separate or part of the same pit.

UXB did not do UXO clearance at this site.

REFERENCES

Jacobs Engineering Group, Inc., September 1991. Work Plan, Remedial Investigation Feasibility Study Southeast Industrial Area.

Jacobs Engineering Group, Inc., September 1991. Expanded Site Inspection, Ammunition Storage Area.

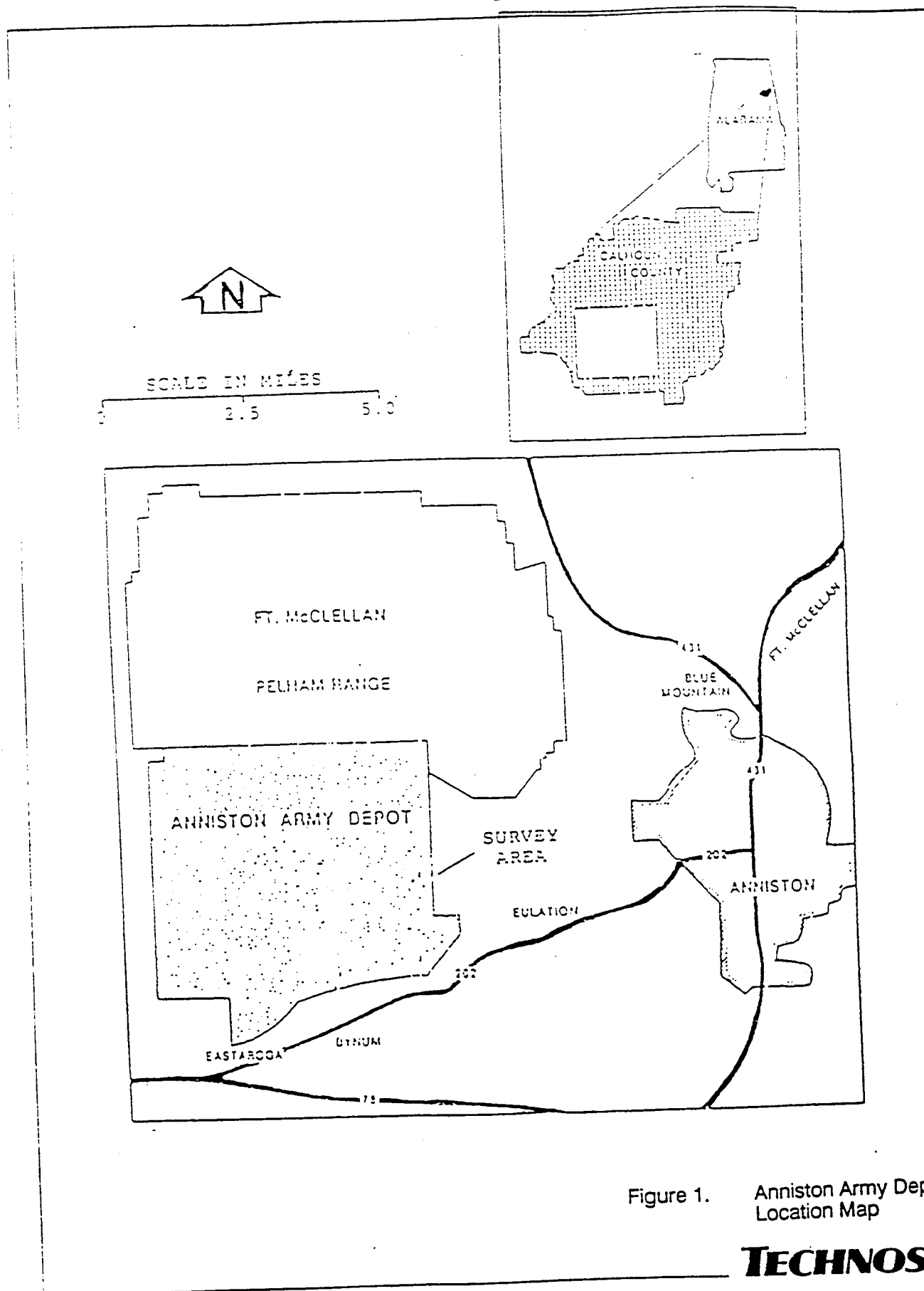
TABLE 1
SUMMARY OF WORK DONE

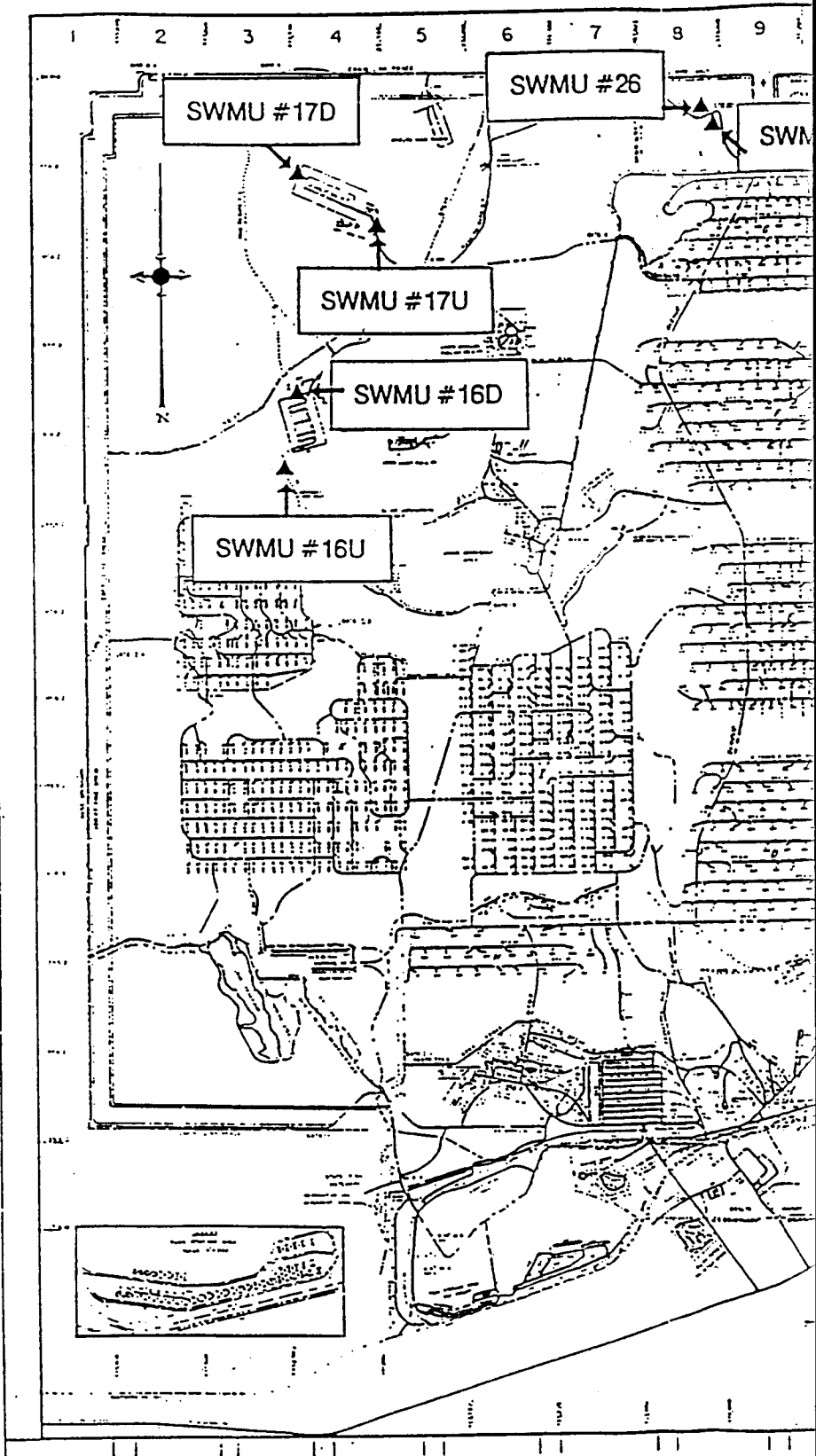
SWMU #	UXB Cleared Site	OBJECTIVE		EM31	MAG	RADAR
		Drill Site Survey	Map Boundaries			
6			X	X	X	
7 - 1st Mile			X	X	X	X
7 - 2nd Mile			X	X		
8 A			X	X	Recon. only	
8 B			X	X	Recon. only	
9			X	X	X (2 lines)	X (3 lines)
10			X	X	X	X (4 lines)
16 - Upgradient	X	X		X		
16 - Downgradient	X	X		X		
17 - Upgradient	X	X		X		
17 - Downgradient	X	X		X		
26			X	X		X (1 line)
27			X	X		

TABLE 2
SUMMARY OF EM CONDUCTIVITY VALUES

SWMU	Range of EM Conductivity Values (mmhos/m) ¹	On-Site "Typical" Conductivity Values (mmhos/m) ²	Off-Site "Background" Conductivity Values (mmhos/m)
1	< 0 - 20	1 - 6	---
2	0 - 22	1 - 11	5.5 to 7.5 woods 7 - 10 parking lot
8A	< 0 - 8	4.8 - 5.5	---
8B	4 - 23	5 - 7	---
9	0 - 11	10 - 15	6 - 8 cut 6 - 8 wood
10	< 0 - 55	6	
16 - Upgradient	3 - 15	6 - 9	---
16 - Downgradient	5 - 15	10 - 11	---
17 - Upgradient	0 - 7	4 - 6	---
17 - Downgradient	< 0 - 8	4 - 6	---
26	< 0 - 18	9 - 12	---
27	< 0 - 19	8	

- ¹ Maximum range of EM values from Surfer DAT File. Note that contour maps may not show complete range due to contour intervals selected.
- ² On-site "typical" conductivity values are those which represent the best estimate of on-site "background" values or are generally the lower conductivity values found at the site.





19

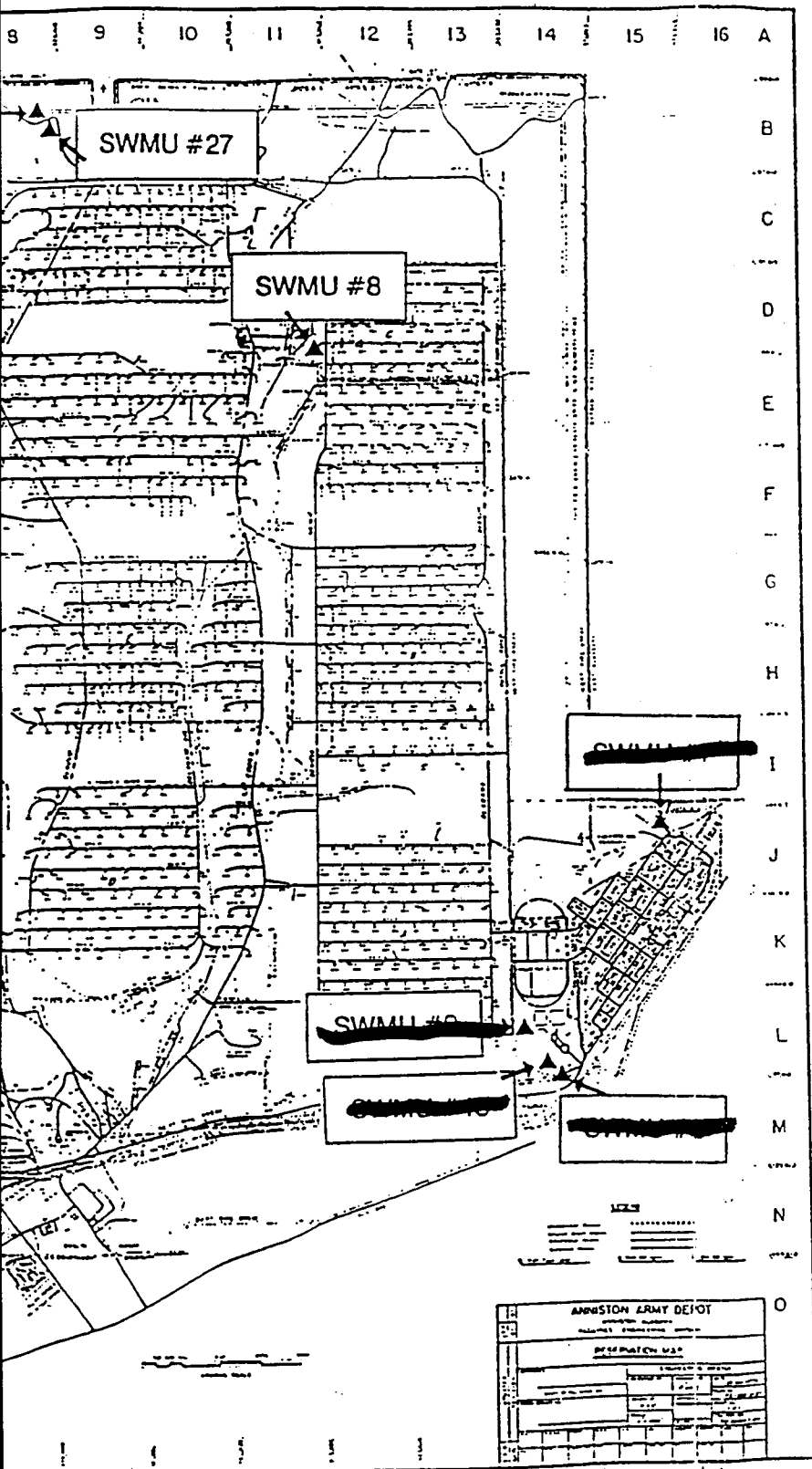
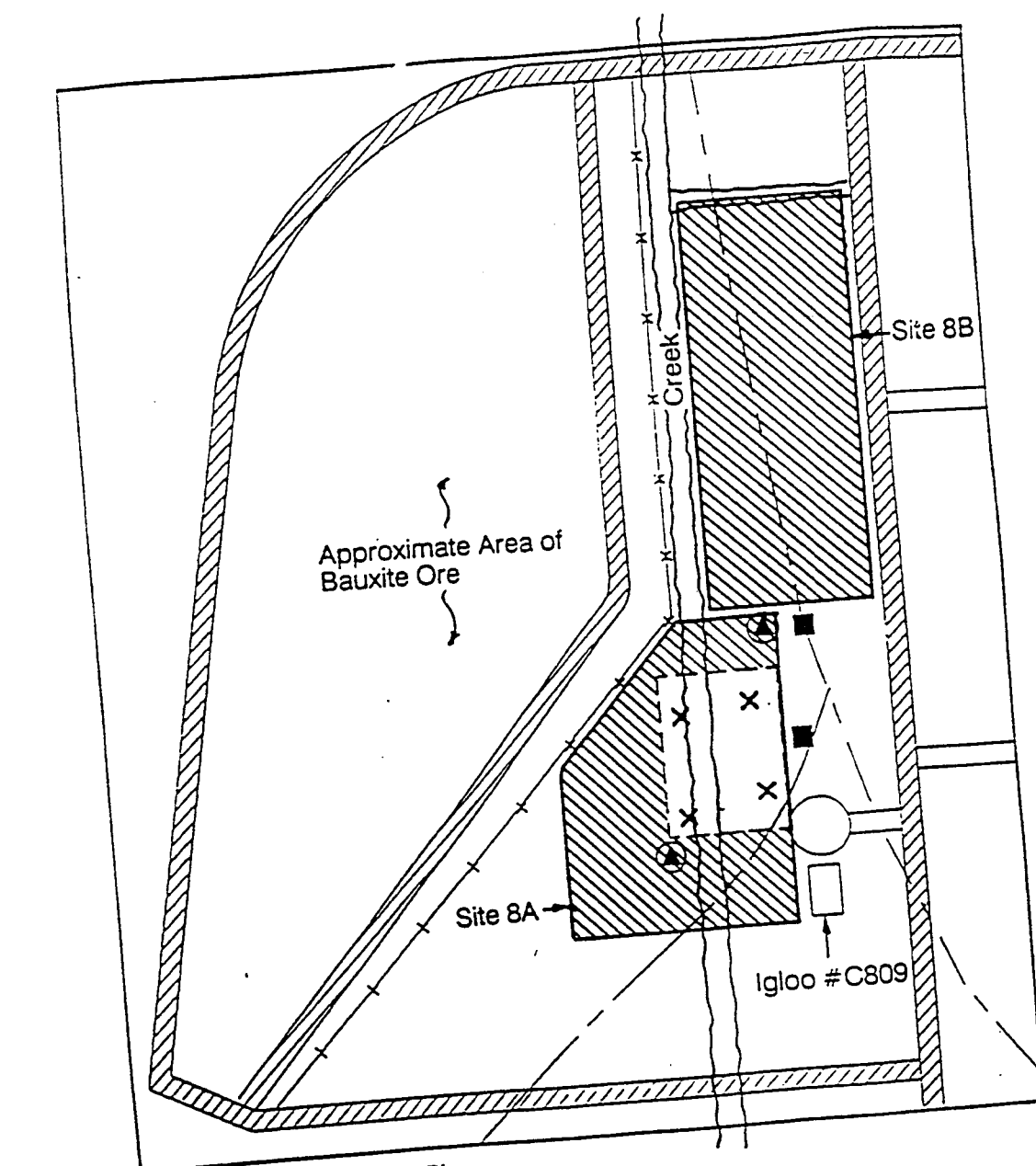


Figure 2. Site Location Map

TECHNOS

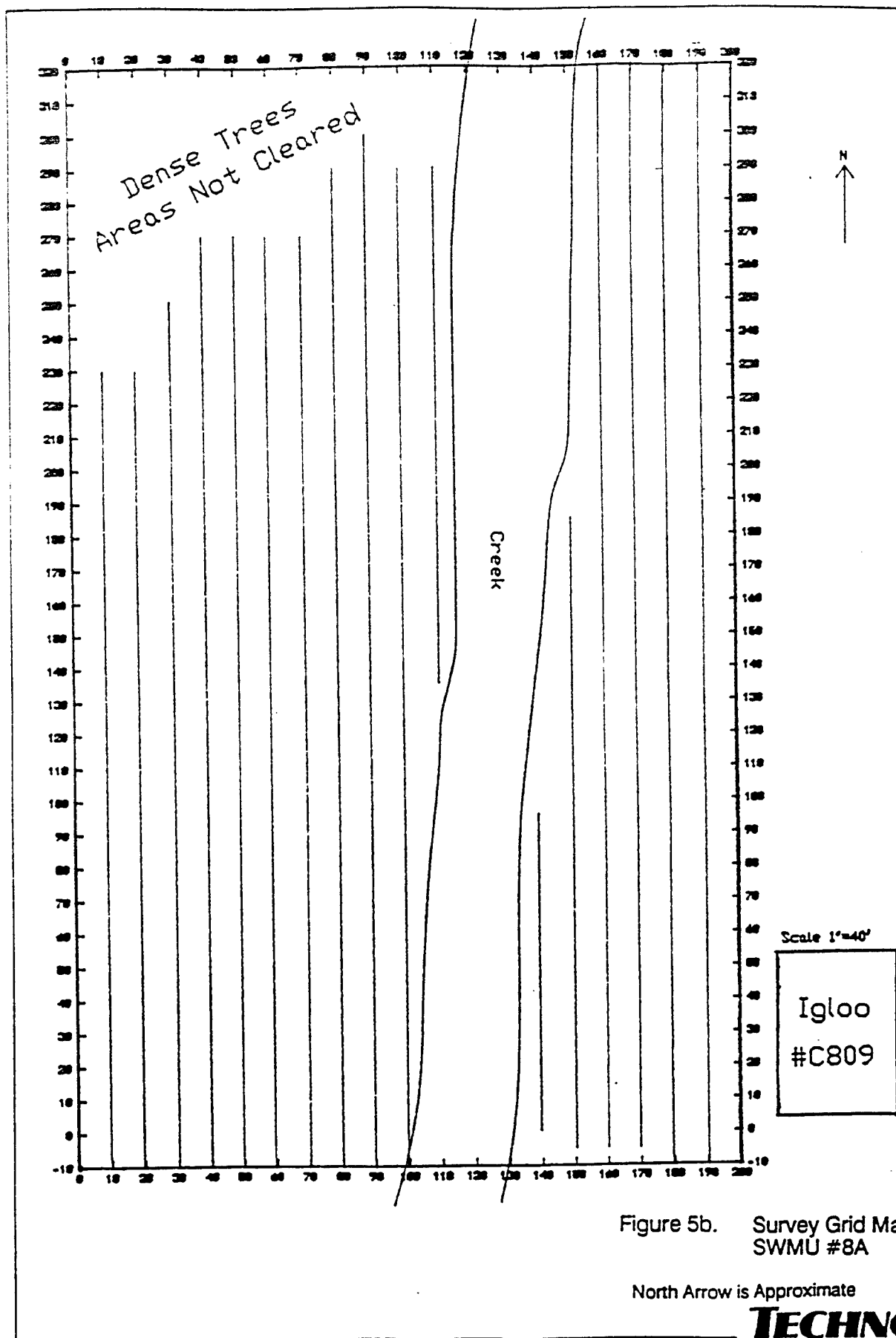
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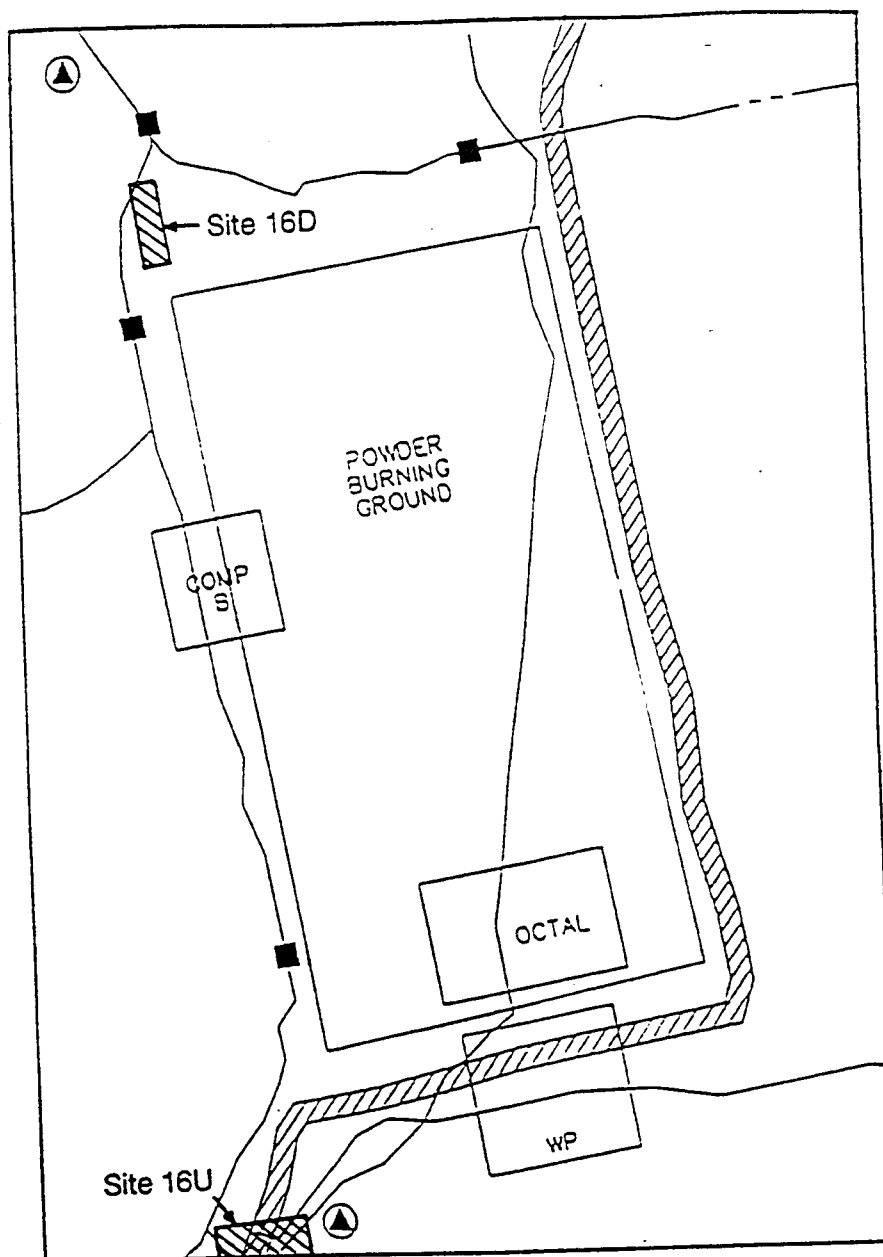



- Area Identified in Jacobs Work Plan
 - Areas Actually Surveyed
 - SURFACE SOIL SAMPLE
 - SEDIMENT
 - SOIL BORING/MONITORING WELL
- From Jacobs Engineering Group, Inc.
Work Plan

Figure 5a. Site Map of SWMU #8
Drawing not necessarily to scale.
Site location and orientation are approximate.
North Arrow is Approximate

TECHNOS





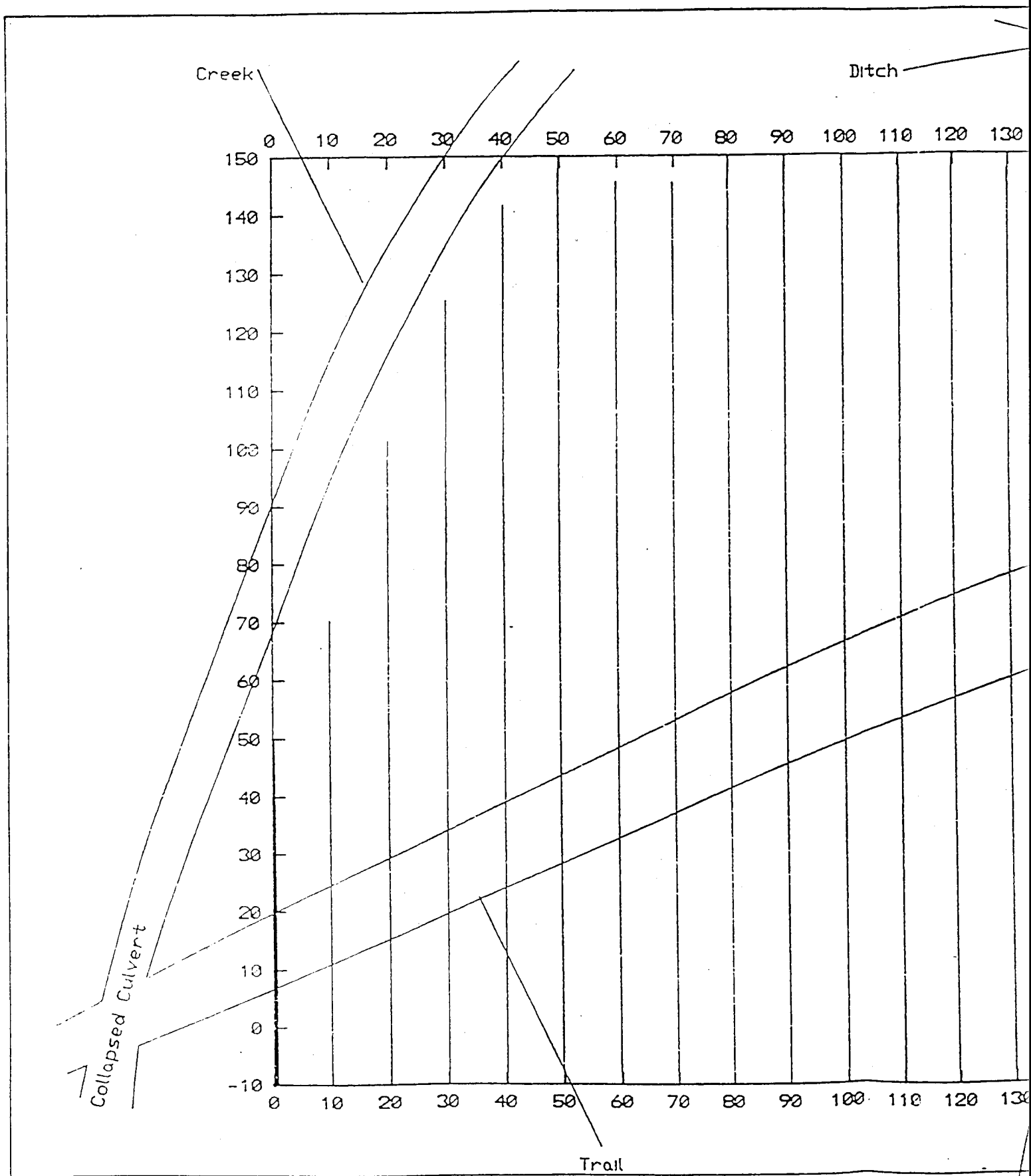
 Sites Actually Surveyed

 SOIL

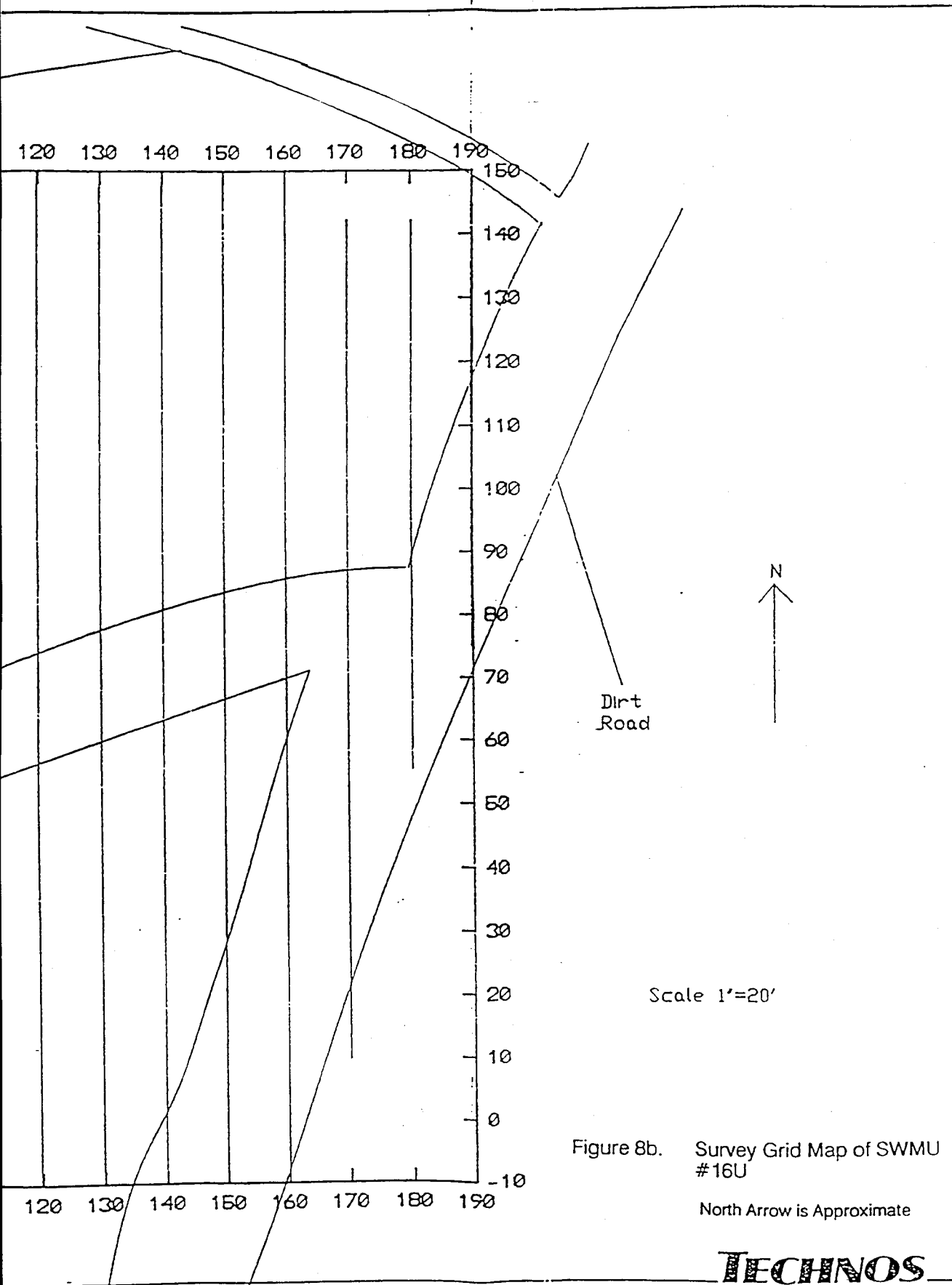
 SOIL BORING/MONITOR WELL
From Jacobs Engineering Group, Inc.
Work Plan

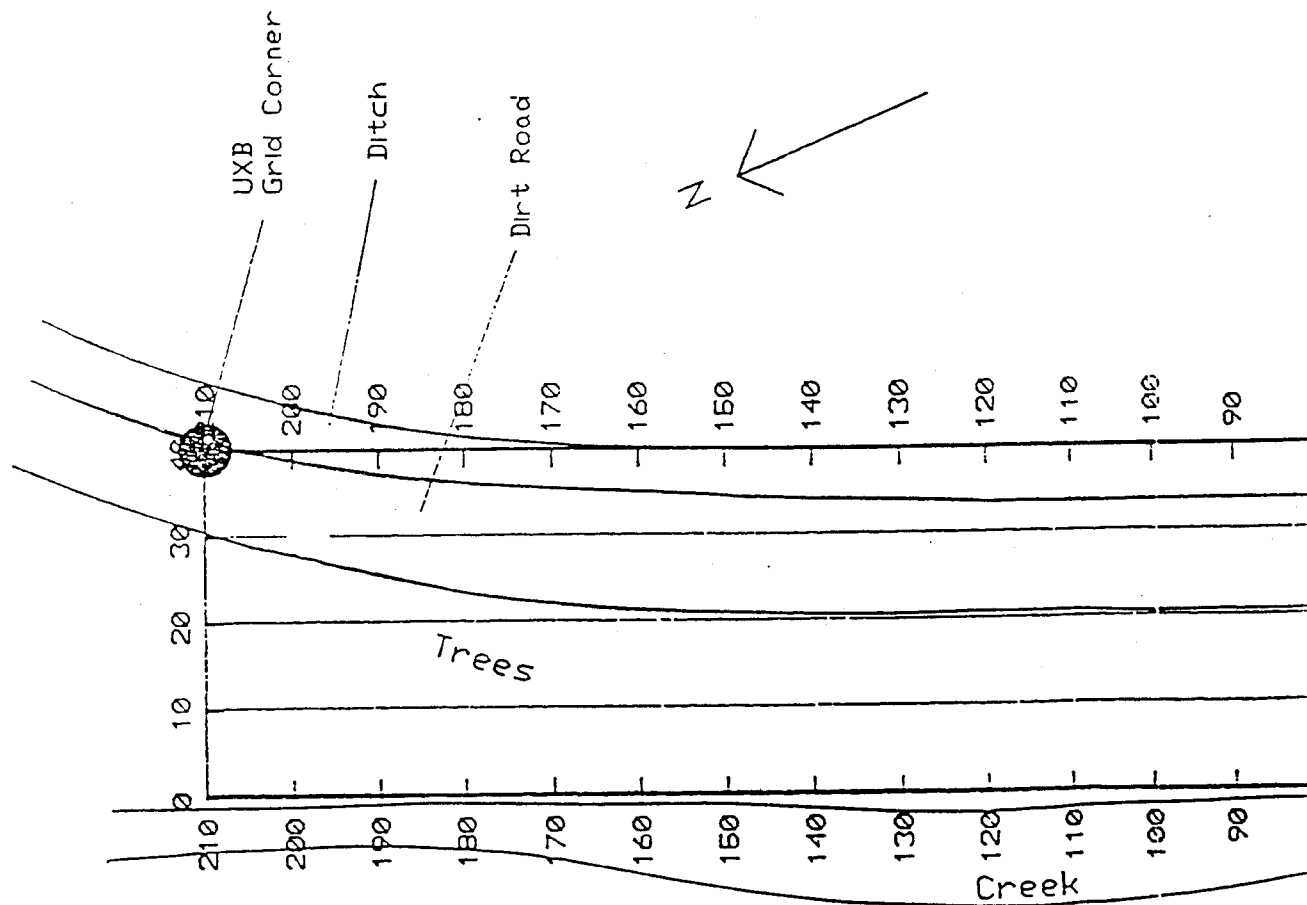
Figure 8a. Site Map of SWMU #16
Drawing not necessarily to scale.
Site location and orientation are approximate.
North Arrow is Approximate

TECHNOS



195





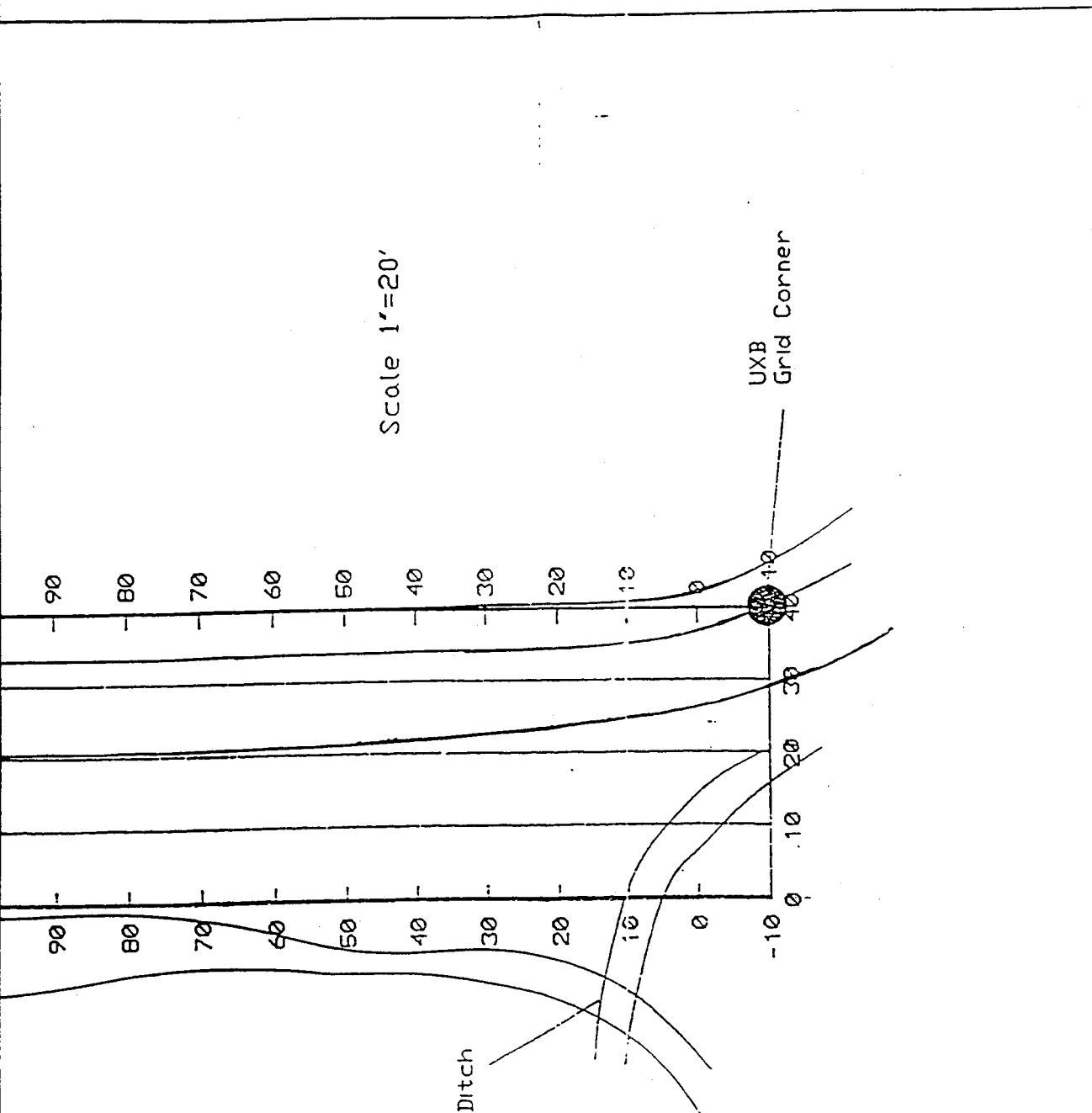
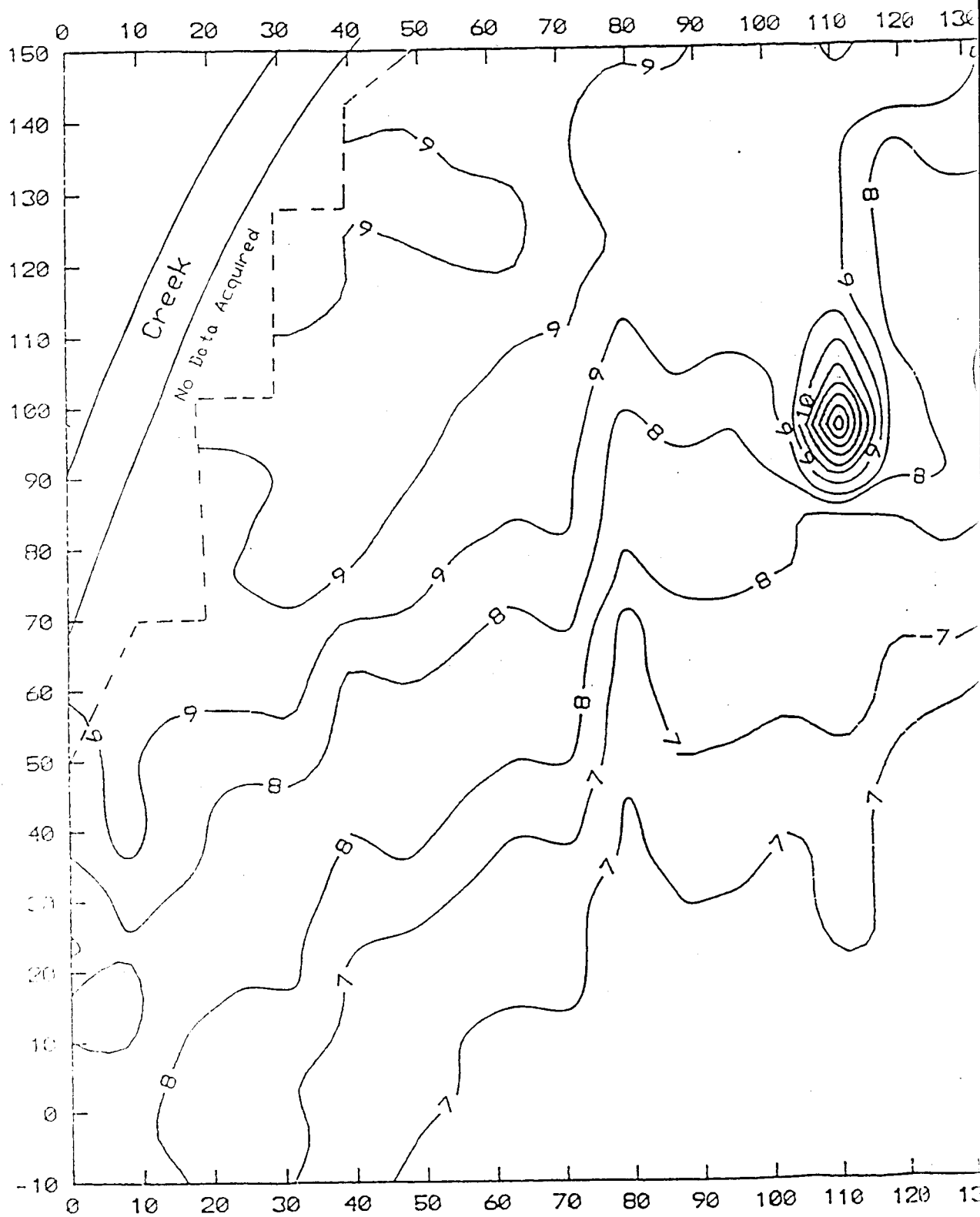


Figure 8c. Survey Grid Map of SWMU #16D
North Arrow is Approximate

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10/1/77

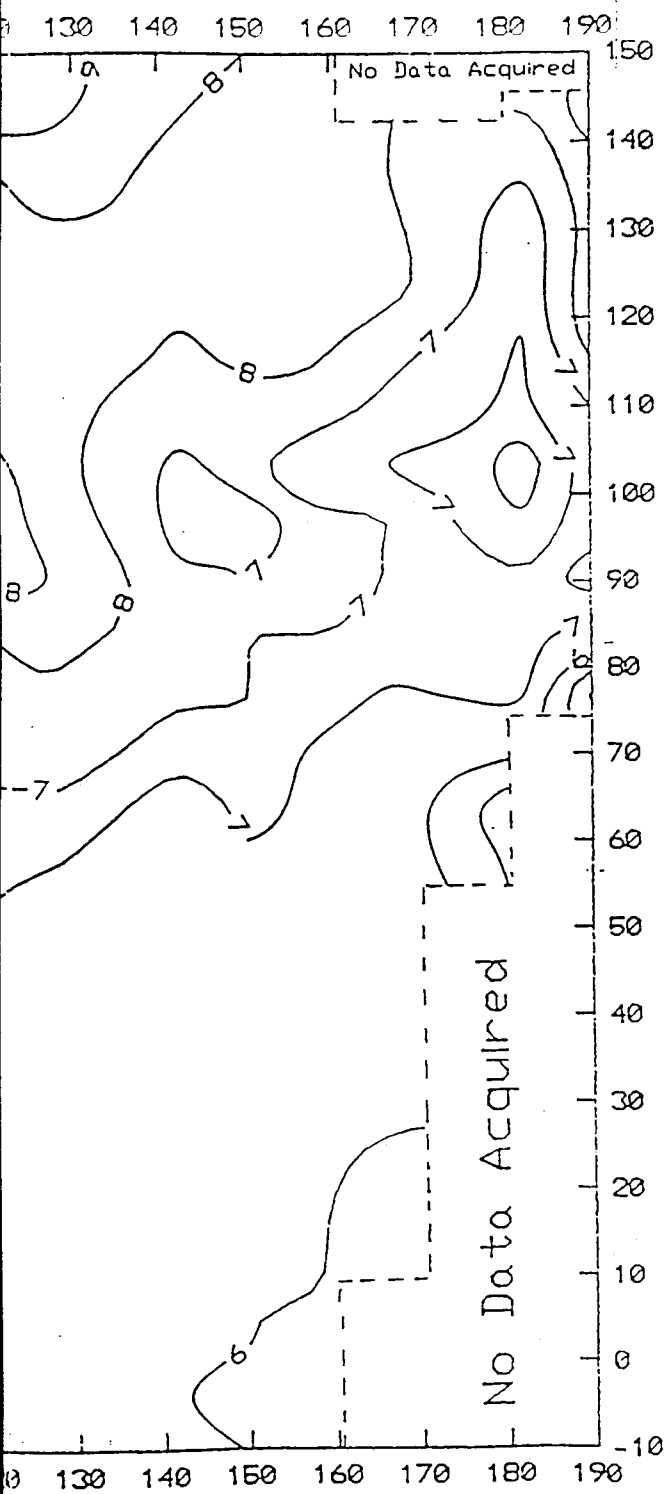
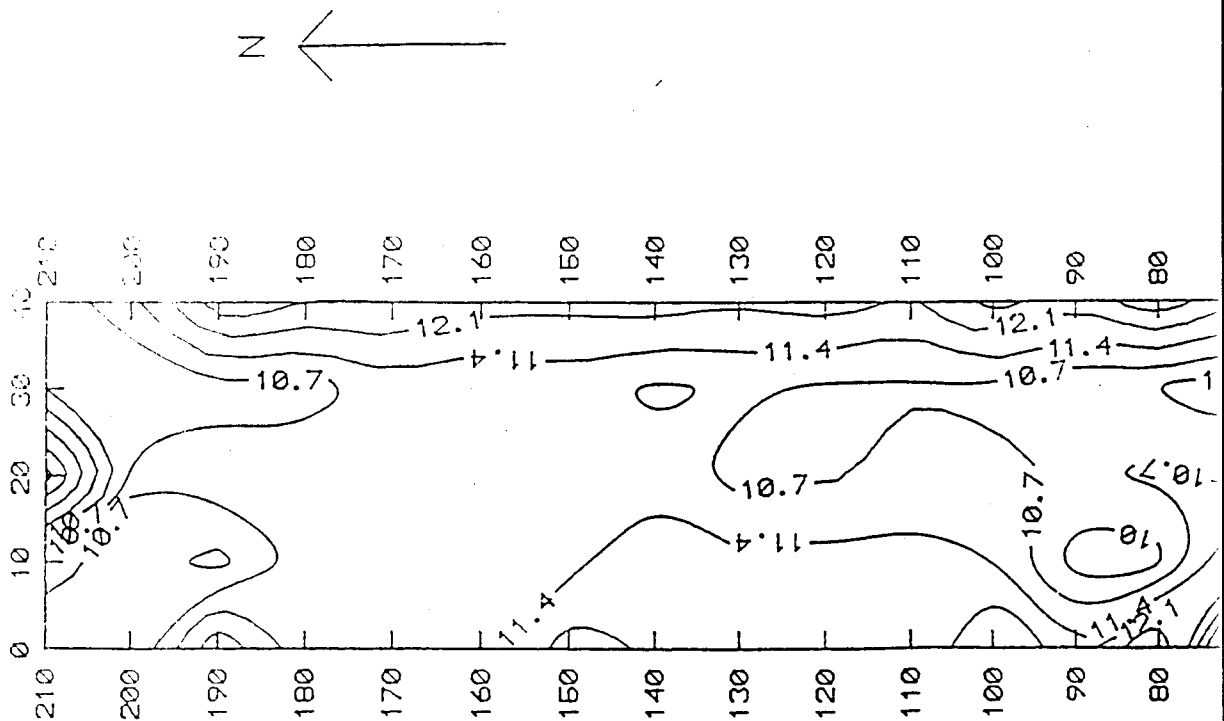


Figure 8d. EM Conductivity Contour Map of SWMU #16U

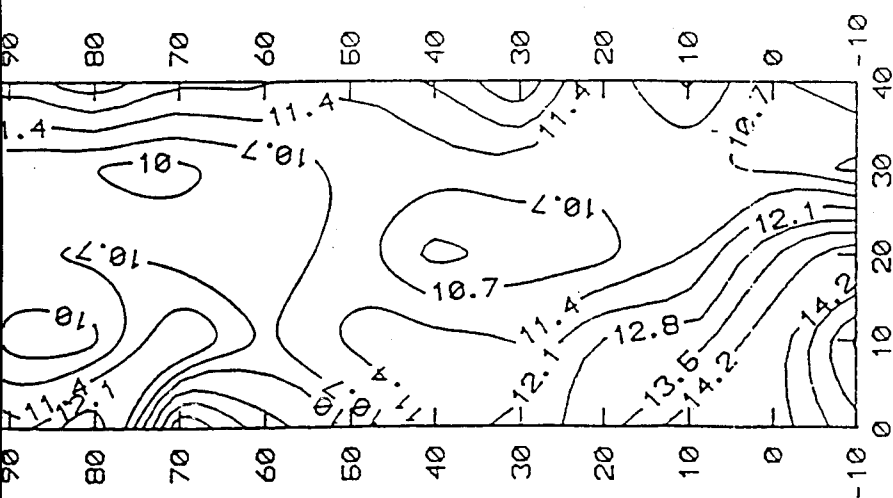
North Arrow is Approximate

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208-53



1110



Scale 1"=20'

Figure 8e. EM Conductivity Contour Map
of SWMU #16D
North Arrow is Approximate

TECHNOS

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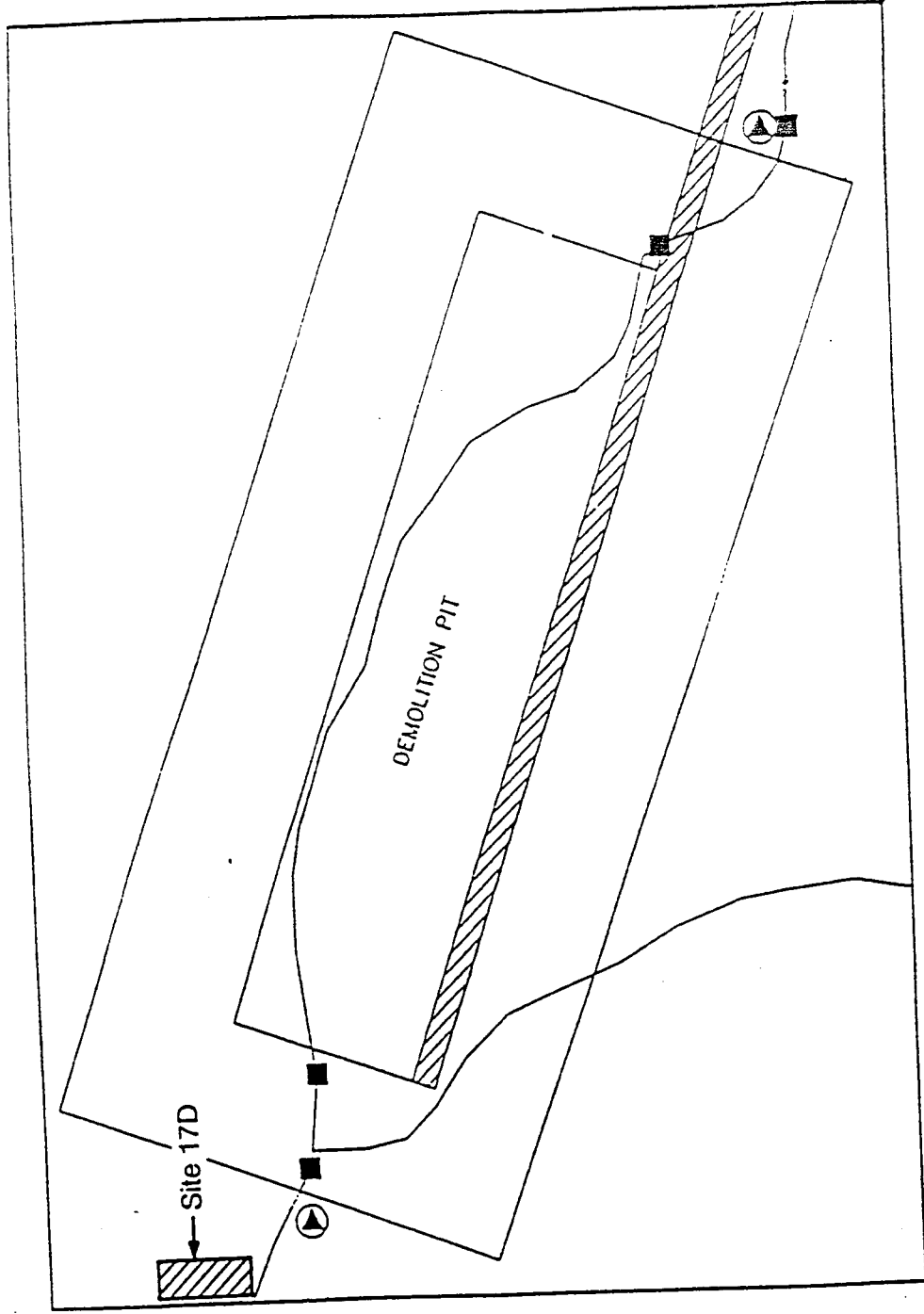
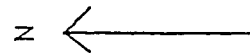


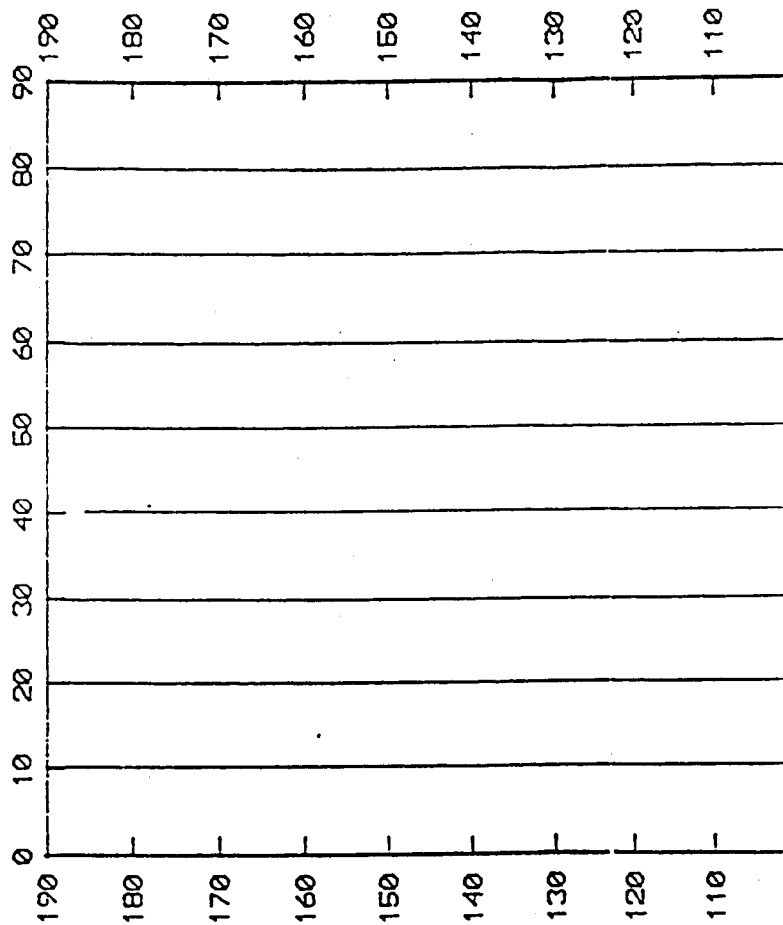
Figure 9a. Site Map of SWMU #17
Drawing not necessarily to scale.
Site location and orientation are approximate.
North Arrow is Approximate

TECHNOS

- SOIL
- ▲ SOIL BORING/MONITOR WELL
- From Jacobs Engineering Group, Inc.
Work Plan
- ▨ Sites Actually Surveyed



Pallets and Metal Containers



Hill

Shed

Culvert

Single Tree

1500

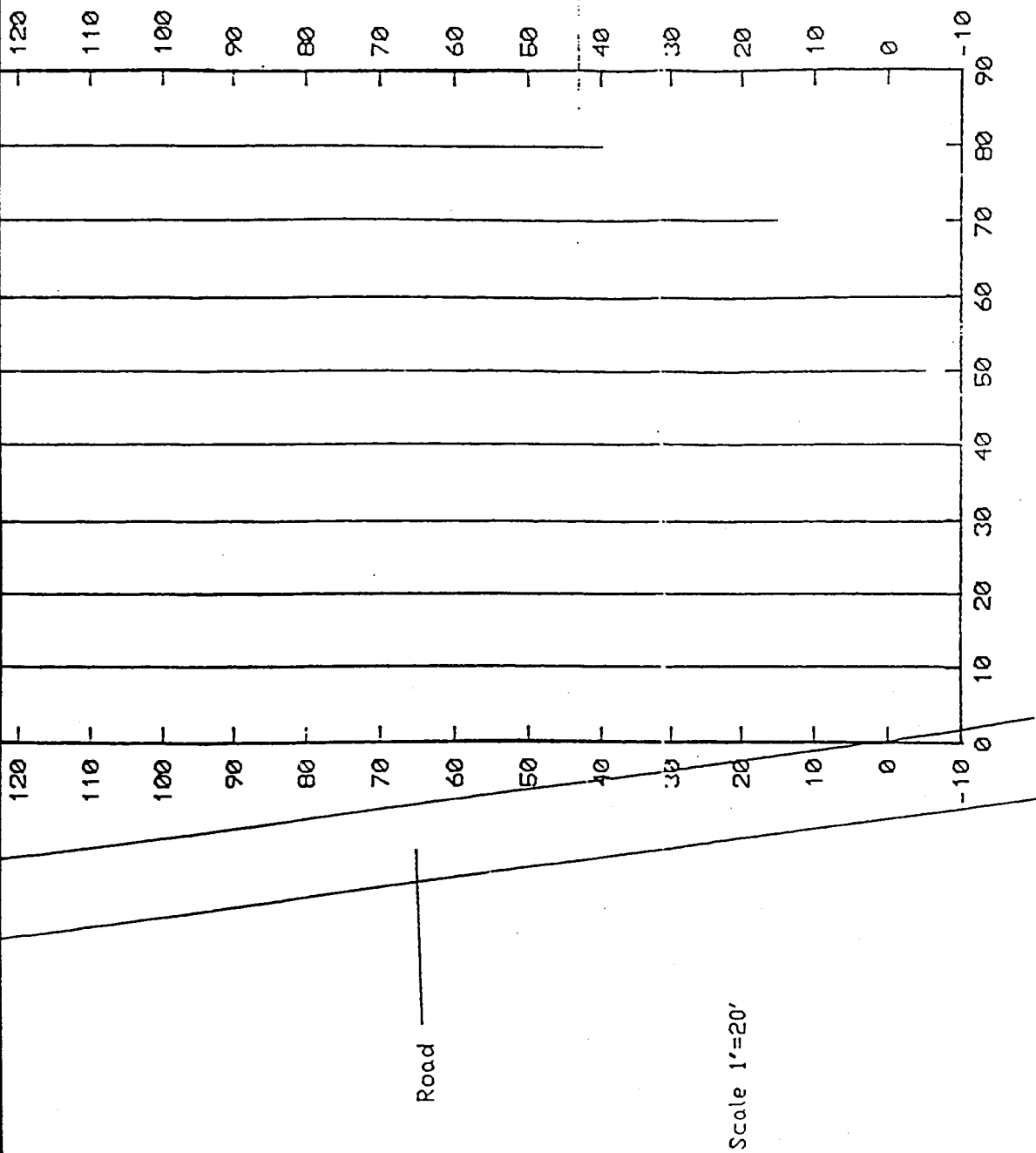
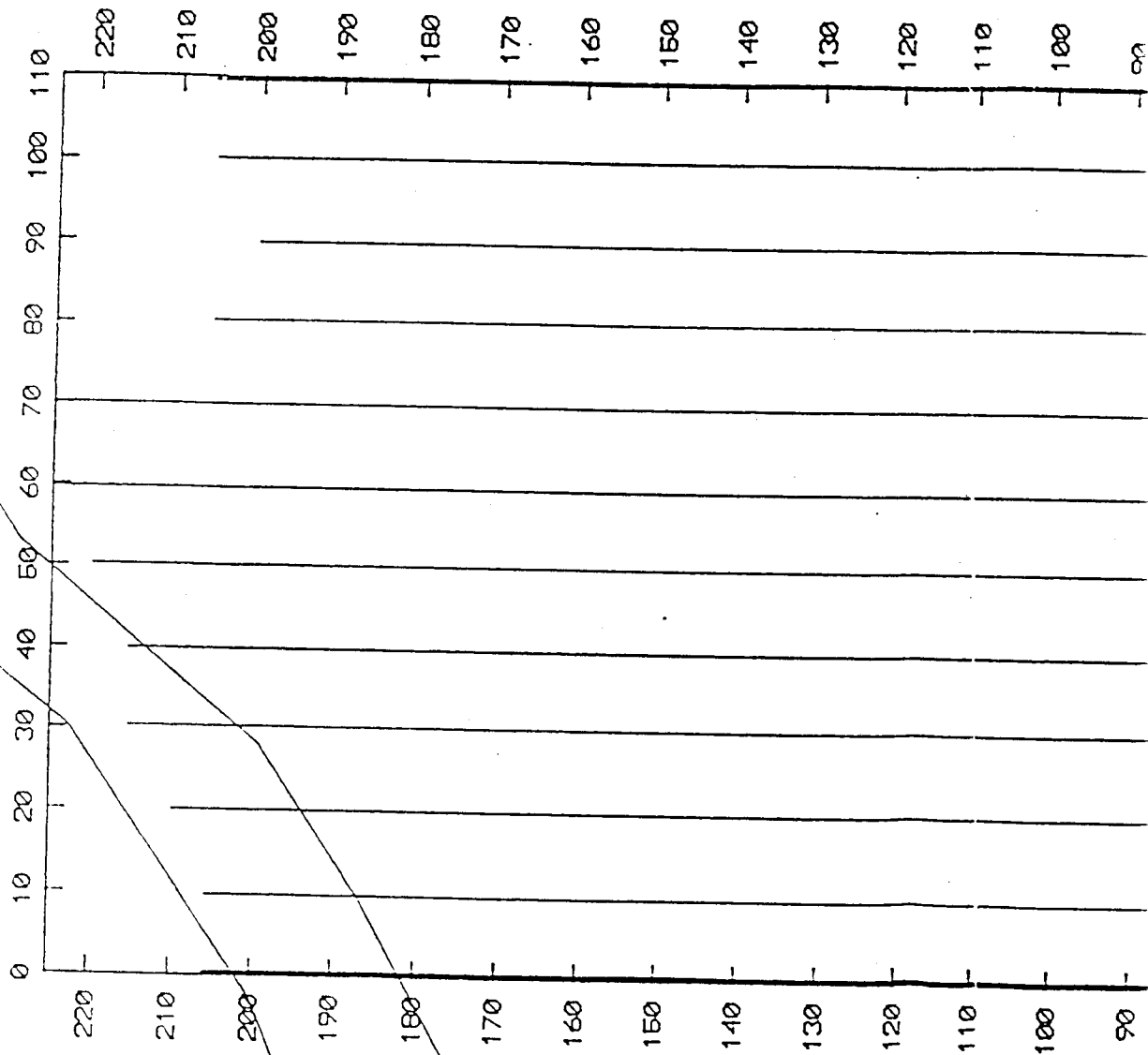


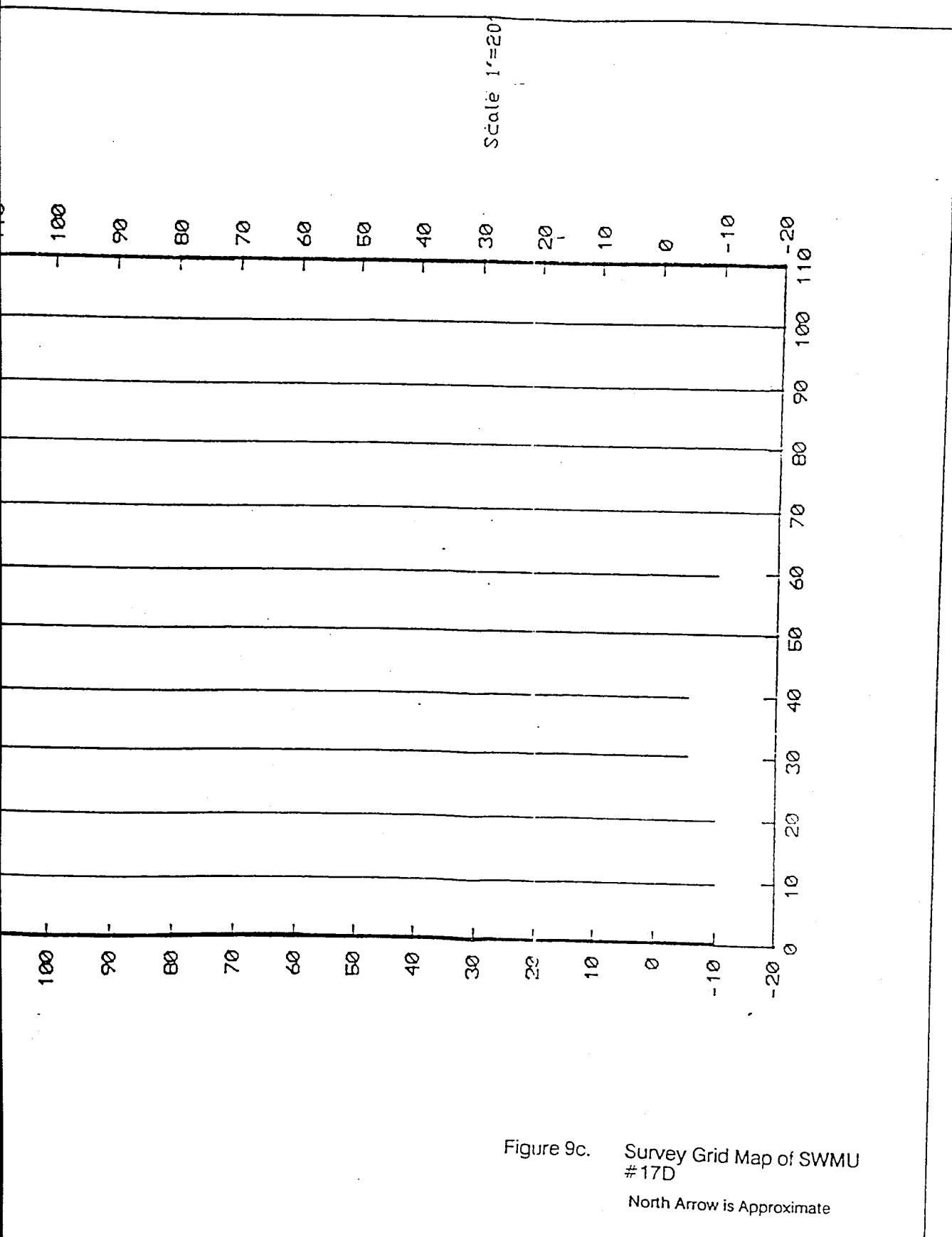
Figure 9b. Survey Grid Map of SWMU #17U

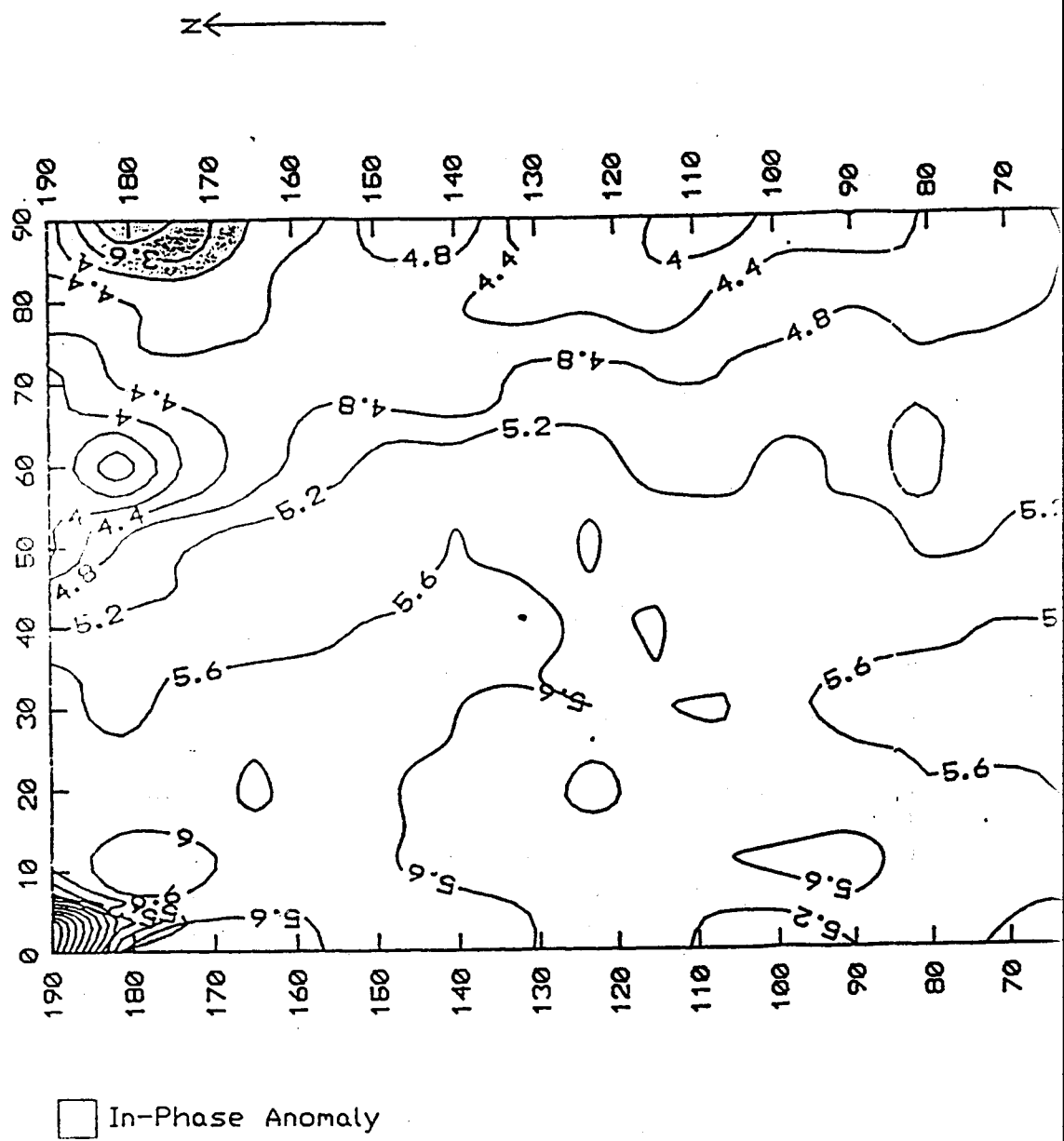
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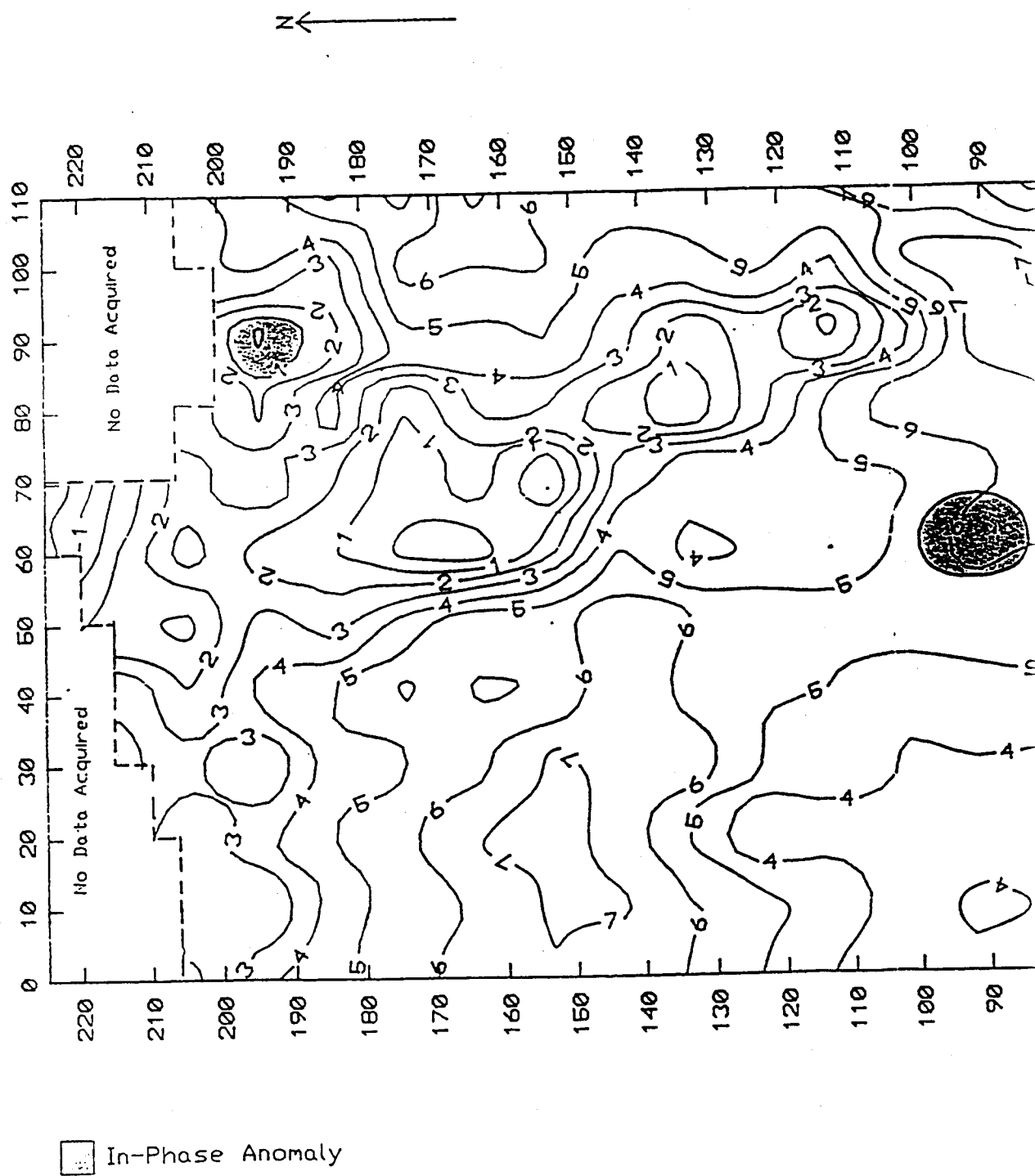
N ←

Creek









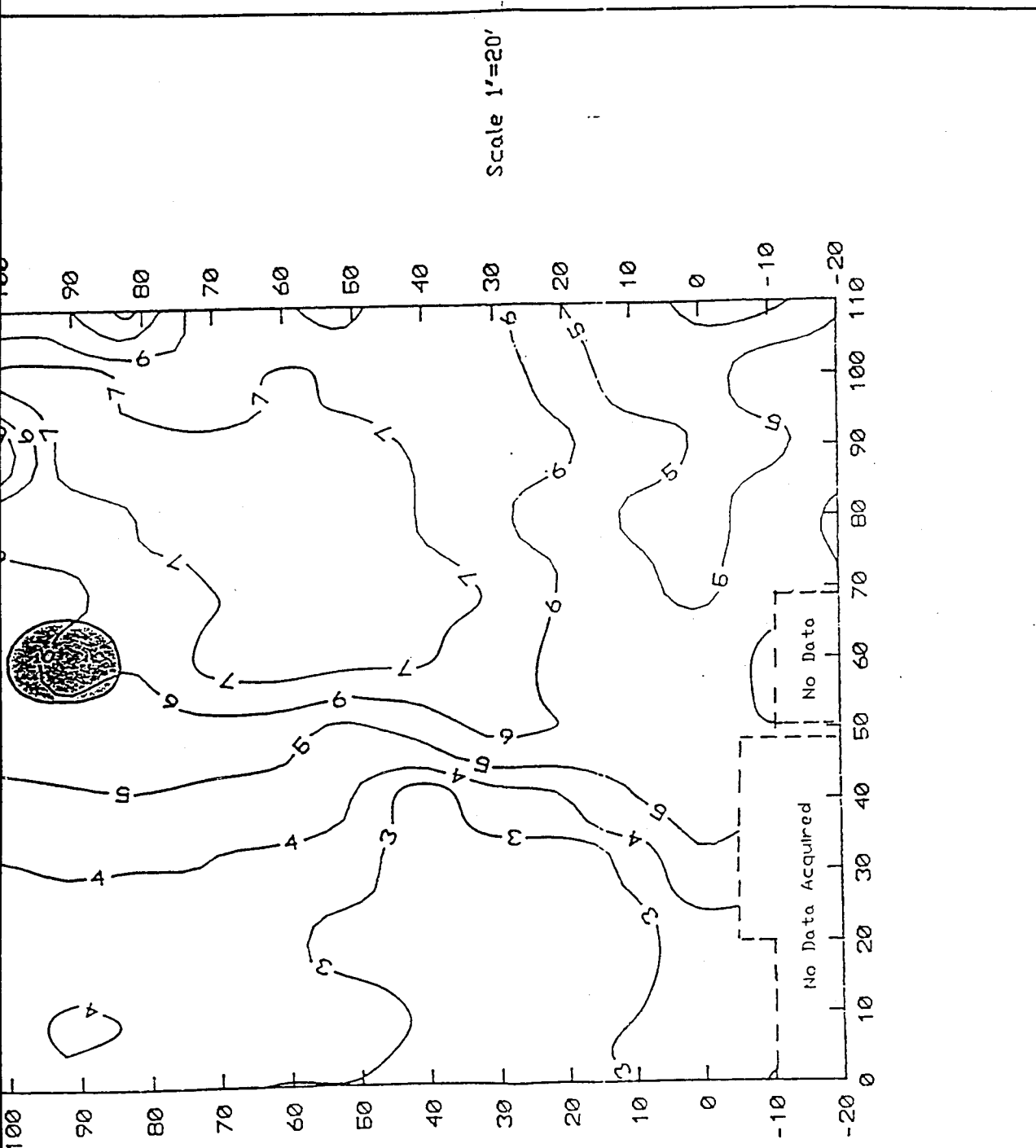
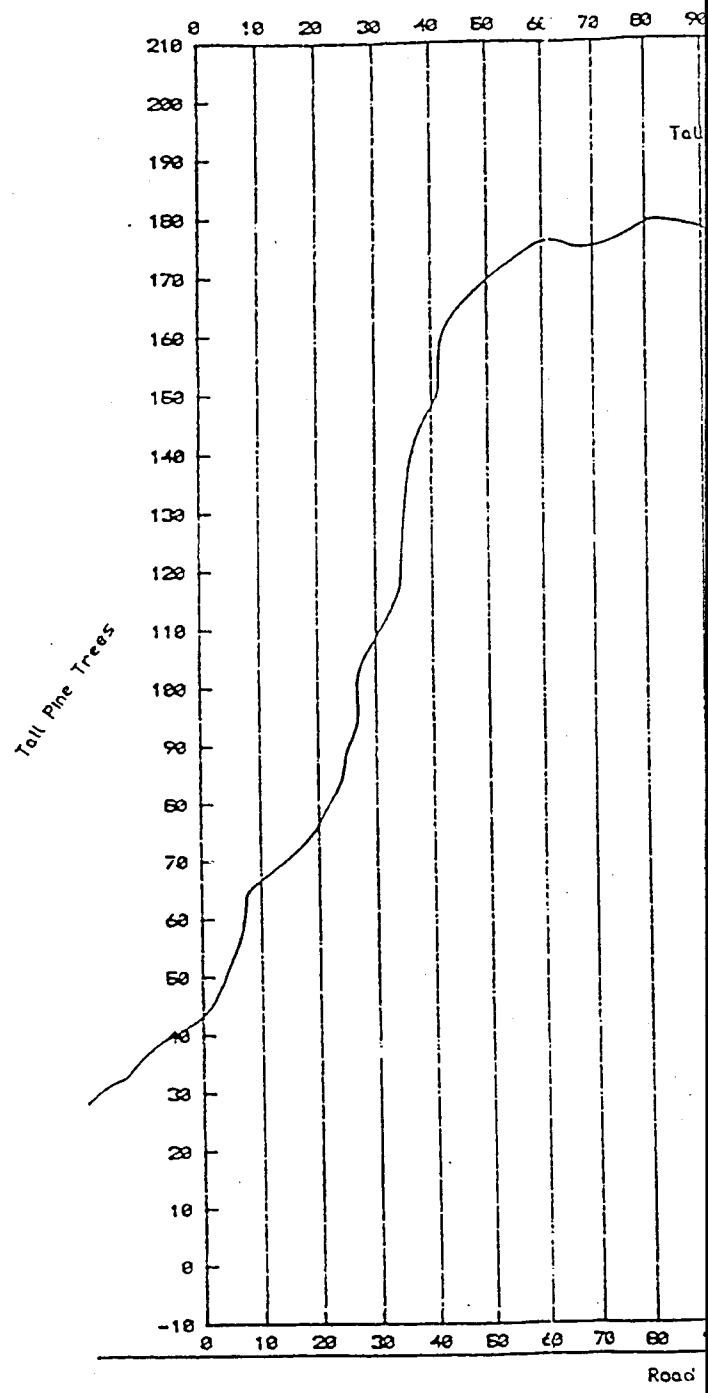


Figure 9e. EM Conductivity Contour Map
of SWMU #17D
North Arrow is Approximate

TECHNOS



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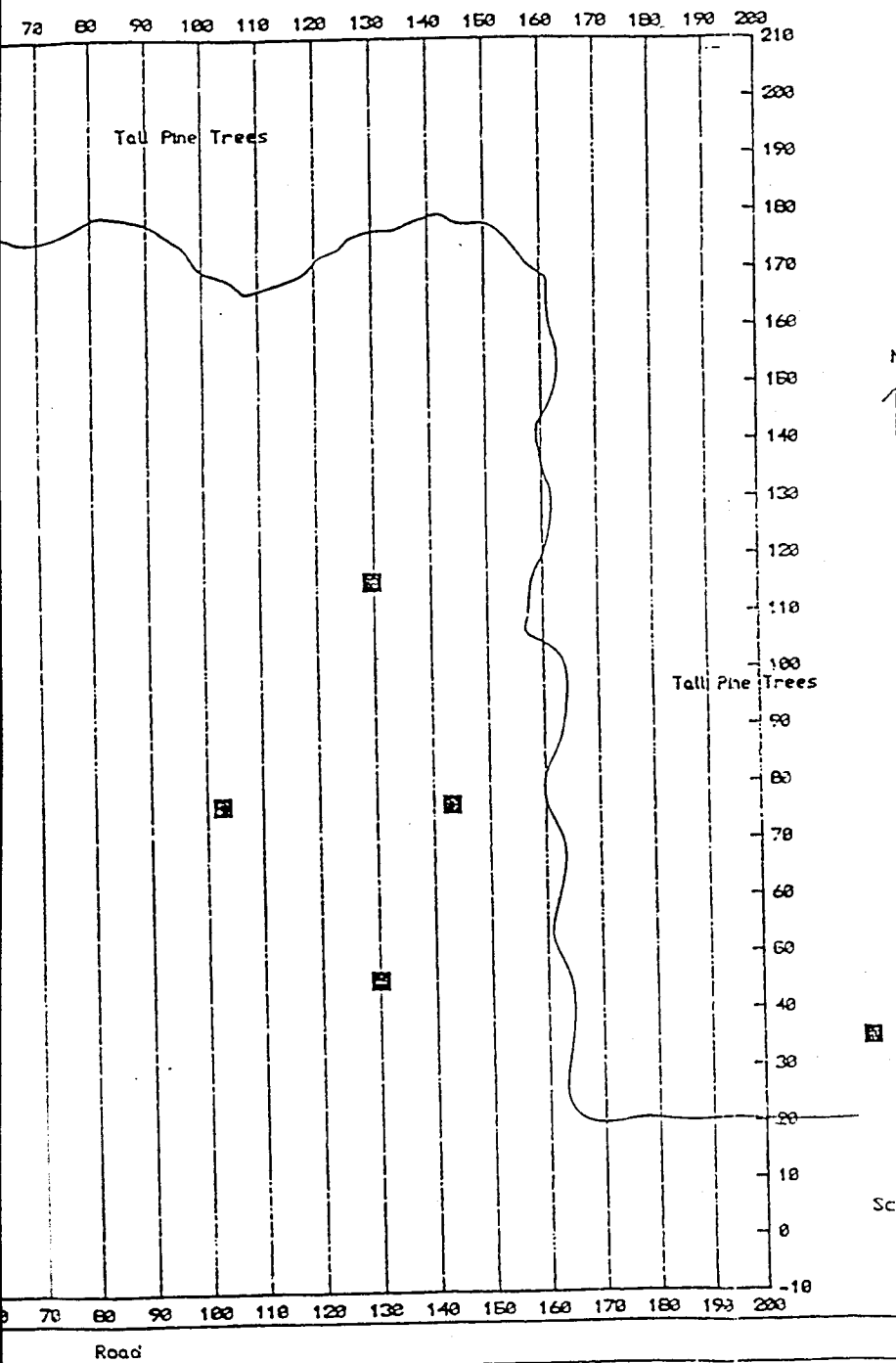
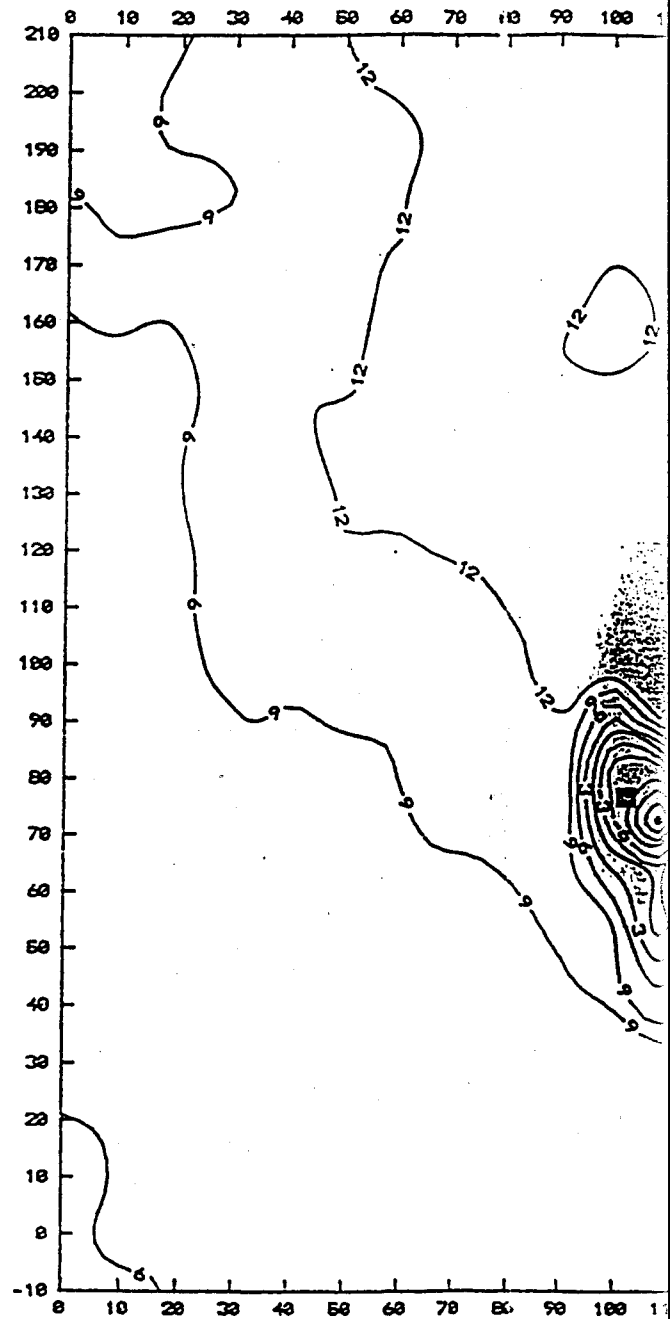
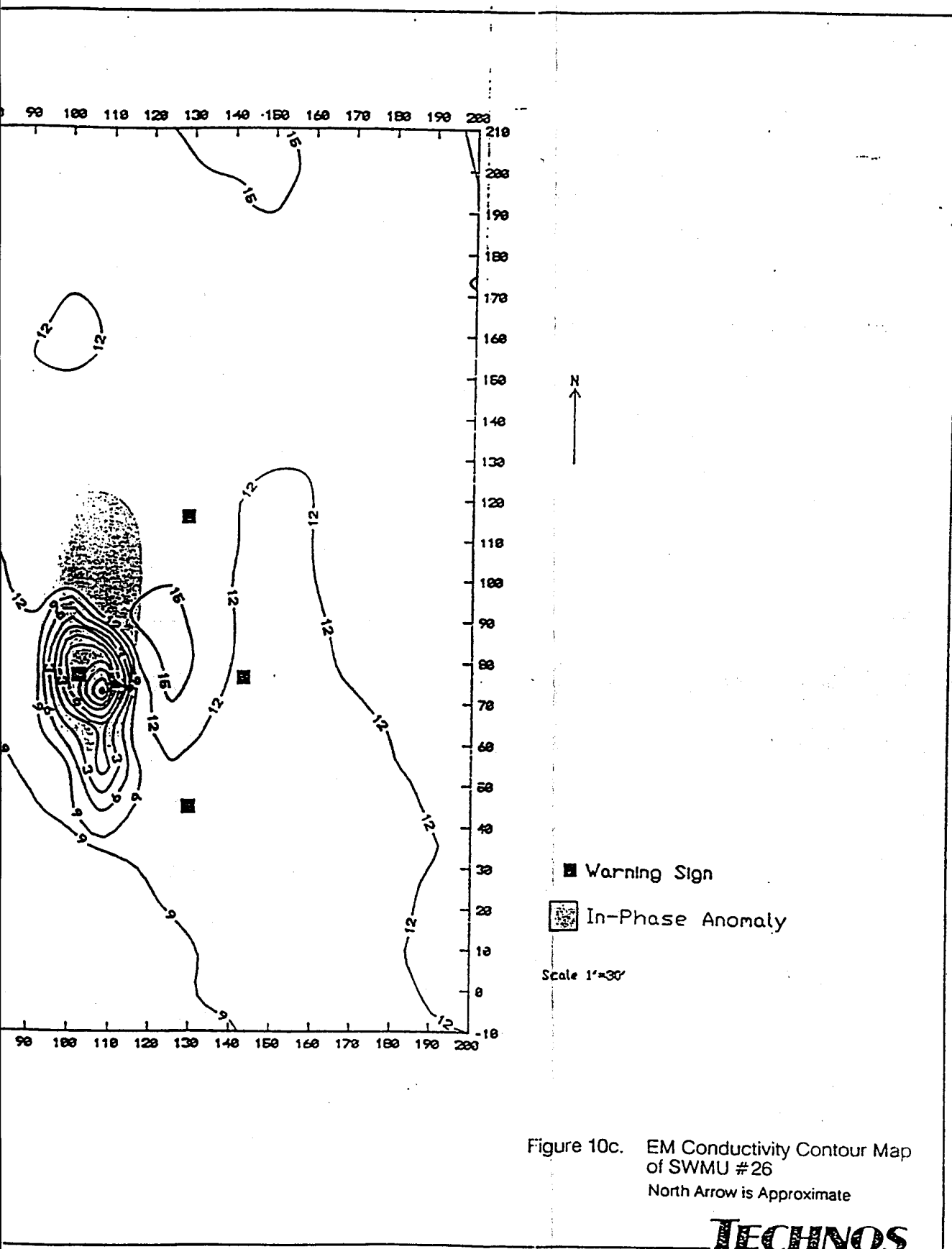


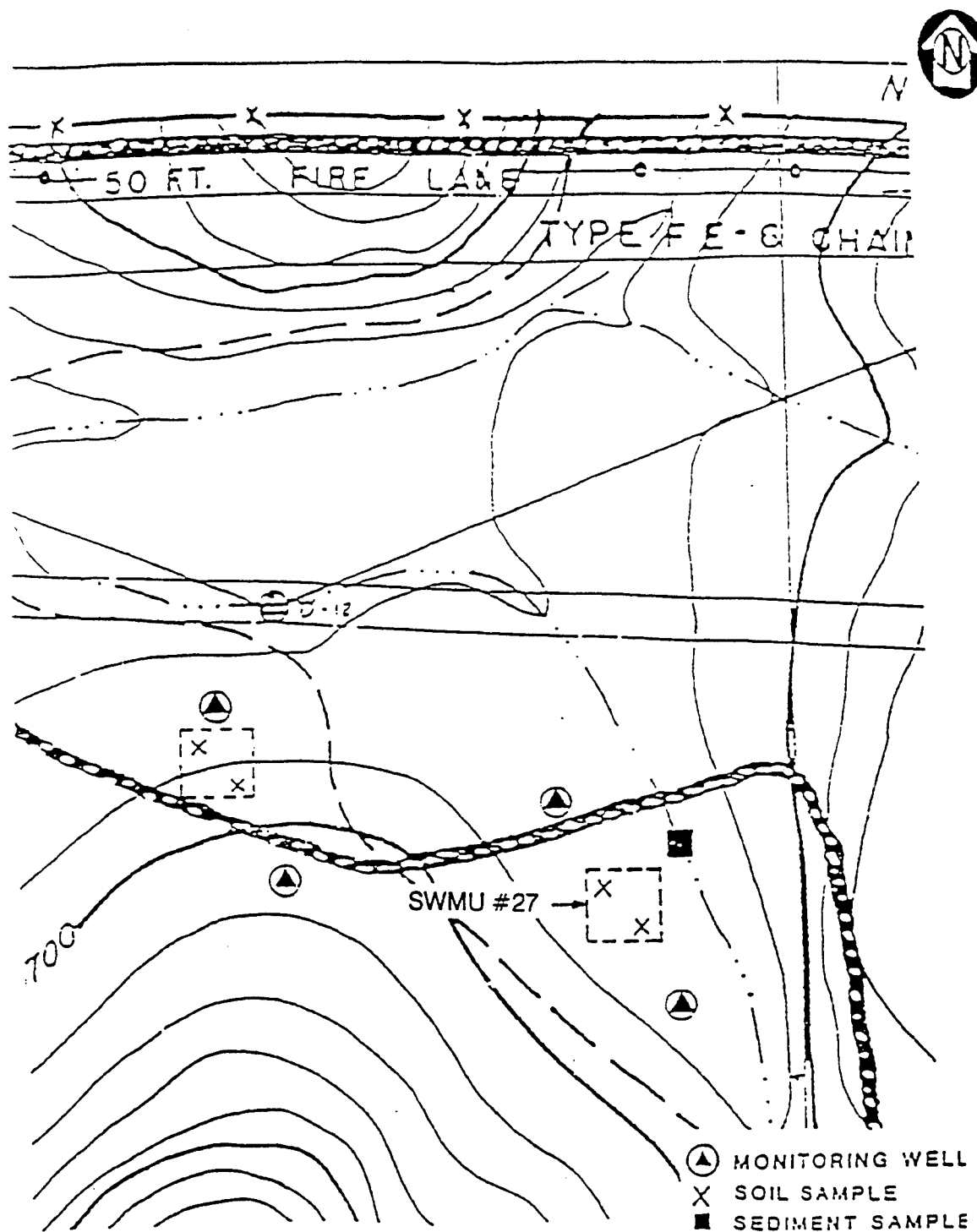
Figure 10b. Survey Grid Map of SWMU #26

North Arrow is Approximate

TECHNOS





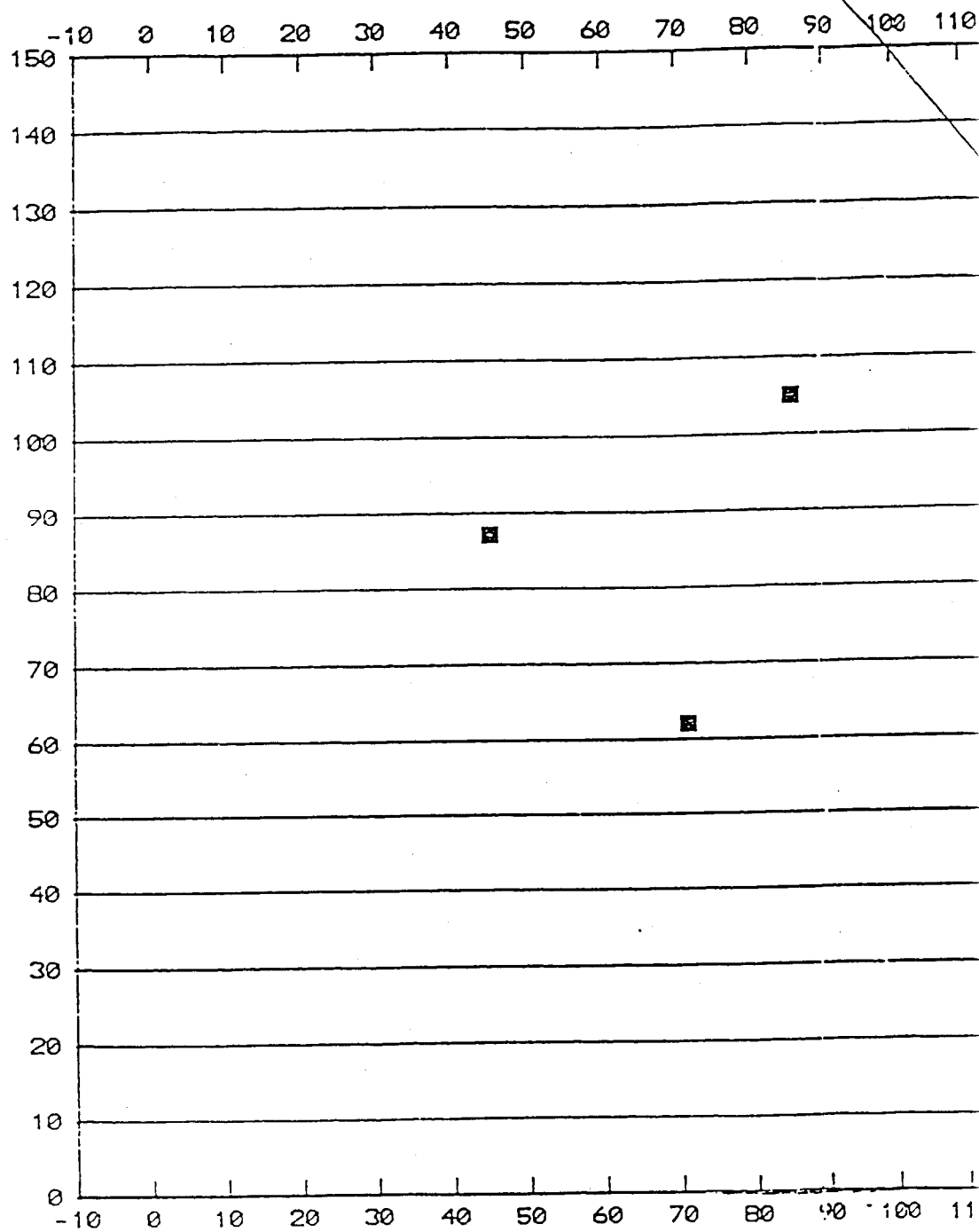


From Jacobs Engineering Group, Inc.
Work Plan

Figure 11a. Site Map of SWMU #27
Drawing not necessarily to scale.
Site location, orientation and
north arrow are approximate.

TECHNOS

Scale 1"=20'



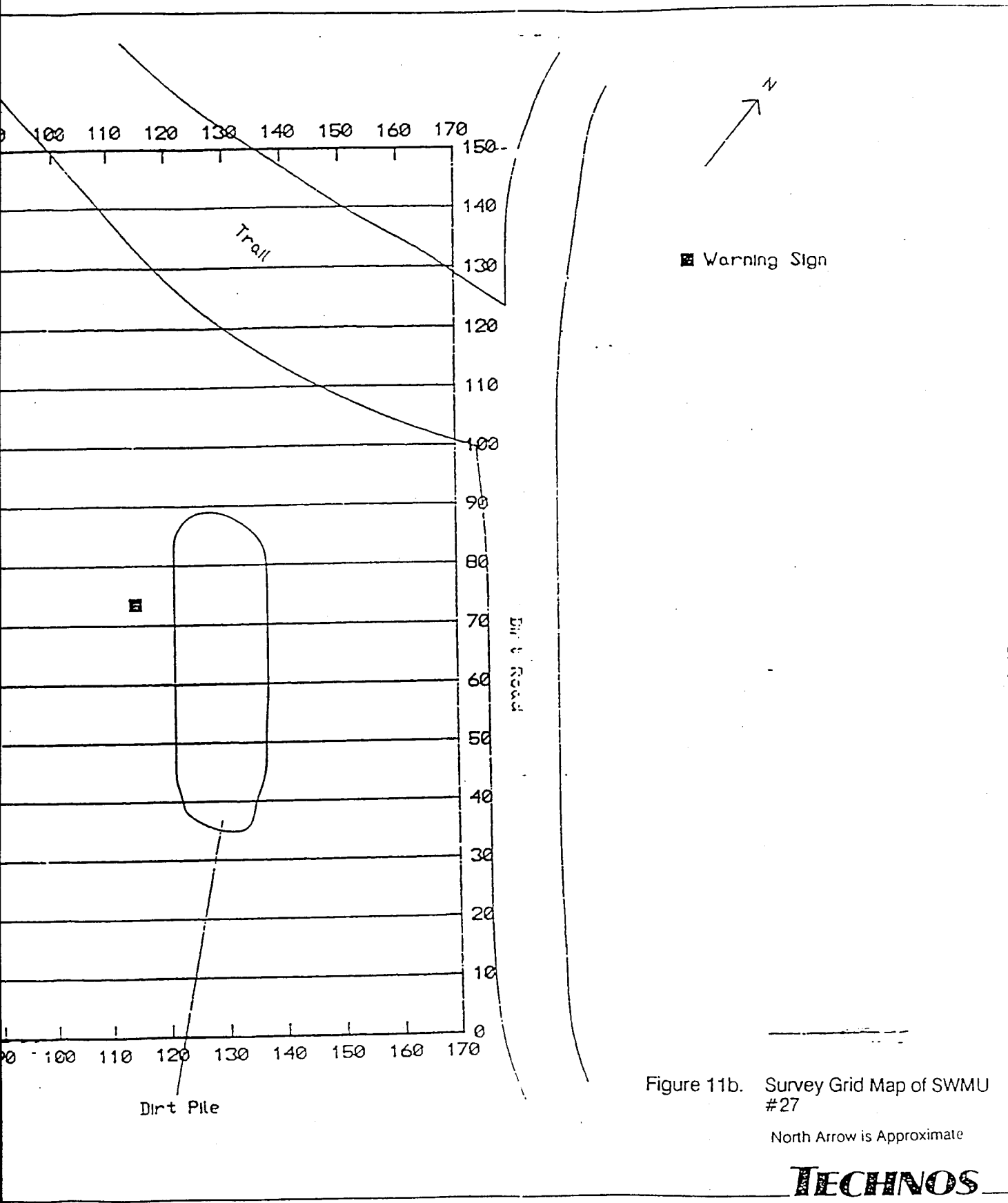
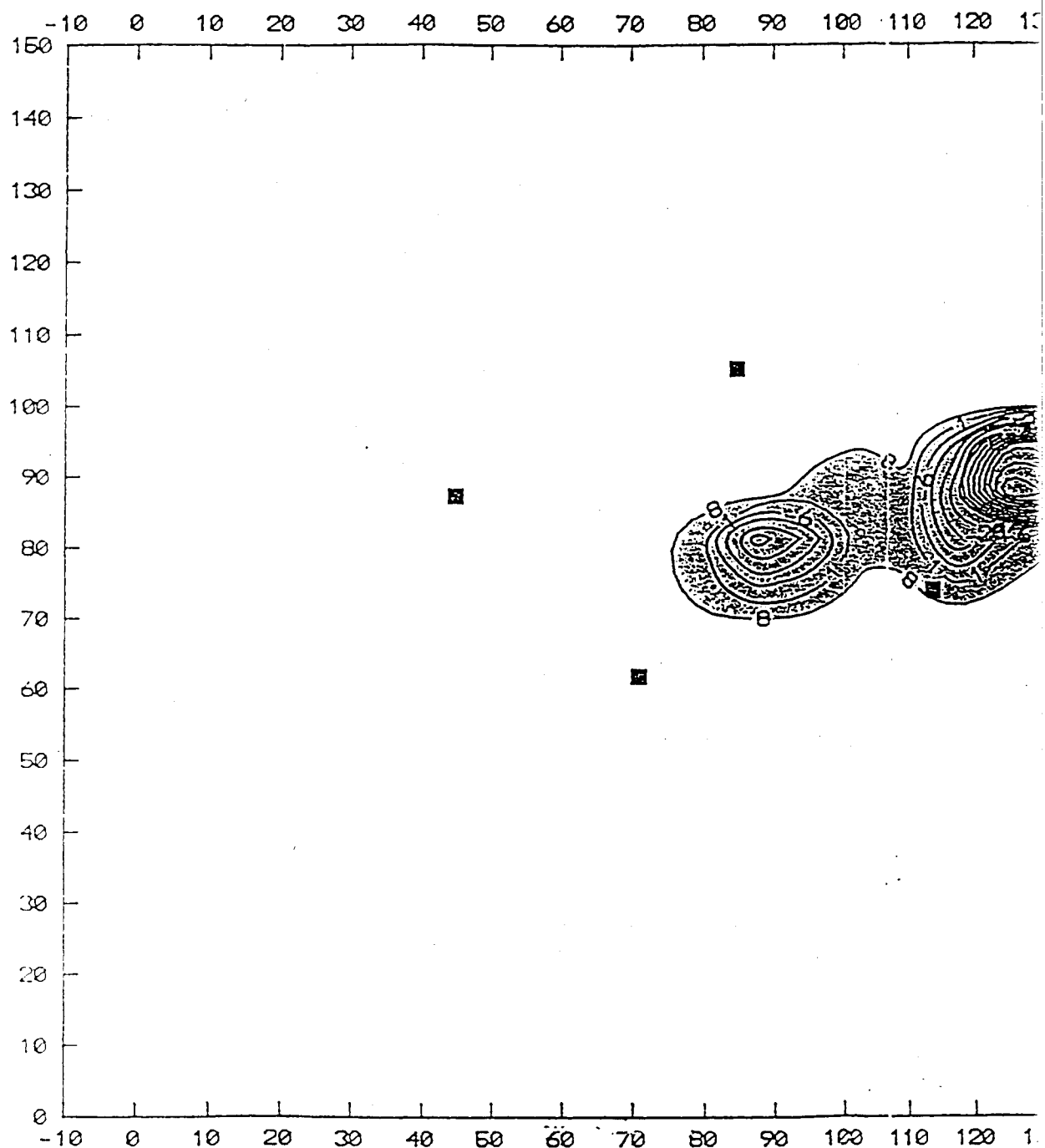


Figure 11b. Survey Grid Map of SWMU #27

North Arrow is Approximate

TECHNOS

Scale 1"=20'



172

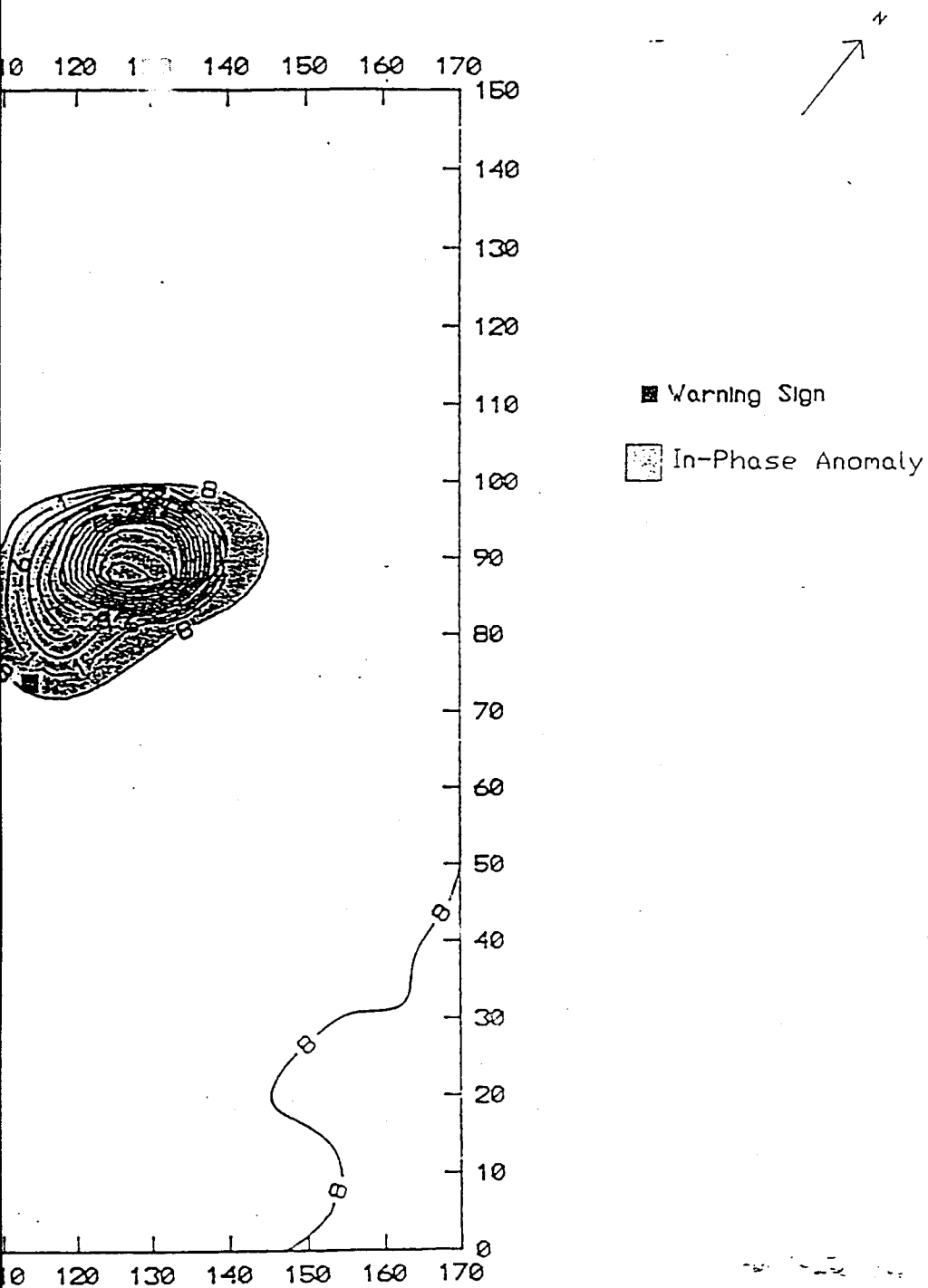


Figure 11c. EM Conductivity Contour Map
of SWMU #27
North Arrow is Approximate

TECHNOS

APPENDIX A

DESCRIPTION OF THE ELECTROMAGNETIC (EM) METHOD

The electromagnetic (EM) method measures the electrical conductivity in millisiemens/meter or millimhos/meter) Electrical conductivity is a function of the type of soil and rock, its porosity and the fluids which fill the pore spaces. The specific conductance of the pore fluids often dominates the measurement.

The method is applicable to the assessment of natural hydrogeologic conditions (Griffith and King, 1969; McNeill, 1980; Telford, et al., 1982). Natural variations in subsurface conductivity may be caused by changes in basic soil or rock types, thickness of soil and rock layers, moisture content, and depth to water table. Localized deposits of natural organics, clay, sand, gravel, or salt-rich zones will affect subsurface conductivity values. Structural features such as fractures or voids can also produce changes in conductivity.

The absolute values of conductivity for geologic materials are not necessarily diagnostic in themselves, but their spatial variations, both laterally and with depth, can be significant. It is the identification of these spatial variations or anomalies which enable the EM method to rapidly find potential problem areas.

Because the specific conductance of fluids in pore spaces can dominate the measurements, detection and mapping of contaminant plumes can often be accomplished using the EM method. Because inorganics in sufficient concentrations are often more electrically conductive than groundwater, both the lateral and vertical extent of an inorganic plume can be mapped using the EM method.

Correlation between groundwater chemistry data and results using electrical methods (EM or resistivity) to map inorganics from landfills has been as good as 0.96 at the 95% confidence level (Benson, et al., 1985). Electrical methods provide a means of directly mapping the extent of the inorganic contaminants in-situ, obtaining direction of flow, and estimating concentration gradients (Figure 8). Time-series measurements can be made with these methods to obtain plume dynamics over time, and thus provide vital information for assessing and modeling of groundwater changes of flow (Benson, et al., 1988).

If the contaminate plume consists of a mix of organics and inorganics, such as leachate from a landfill, a first approximation to the distribution of the organics can often be made by using electrical methods to map the more electrically conductive inorganics. Correlation between groundwater chemistry data for total organic carbon in a landfill leachate and results using electrical methods has been as good as 0.85 at the 95% confidence level (Benson, et al., 1985).

Generally, the geophysical methods are not used to detect and map organic contaminants such as trichloroethylene (TCE). In cases where pure organics such as TCE exist, the EM method can often be used to define permeable pathways or buried channels through which these contaminants can migrate.

Direct detection of hydrocarbons can sometimes be accomplished by looking for a conductivity low associated with the organics. The possibility for such an anomaly exists where large amounts of hydrocarbons have been in place for a long period of time, have replaced pore fluid and there is a sufficient contrast in electrical values between the natural background values and the hydrocarbons. To date this approach has had limited success.

The EM method may be used to obtain data by "profiling" or "sounding". Profiling provides a means of mapping lateral changes in subsurface electrical conductivity to a given depth. Profiling measurements are made by obtaining data at a number of stations along a survey line. The spacings between the profiling measurements will depend upon the geologic variability of the setting and upon the lateral resolution desired. At each station along the profile line, data may be obtained for one depth or a number of depths depending upon project requirements. It is useful to take at least two measurements, a shallow one and a deeper one, so that the influence of the highly variable shallow soils and cultural influences can be assessed. Profiling is well suited to the delineation of hydrogeologic anomalies, mapping of contaminant plumes and location of buried material.

The sounding method provides a means of determining the vertical changes in electrical conductivity correlating with soil and rock layers. In this case, the instrument is located at one location and measurements made at increasing depths. Interpretation of sounding data provides the depth, thickness and conductivity of subsurface layers with different electrical conductivities.

Because the electromagnetic instruments do not require electrical contact with the ground, measurements may be made quite rapidly. Lateral variations in conductivity can be detected and mapped by profiling. Using commonly available frequency-domain EM instruments, profiling station measurements may be made to depths ranging from 2.5 to 200 feet.

Continuous EM profiling data can be obtained from 2.5 feet to a depth of 50 feet (Benson, et al., 1982). These continuous measurements significantly improve lateral

resolution (compared to station measurements) for mapping small hydrogeologic features. Data can be recorded on an analog strip chart recorder or a digital data acquisition system. The excellent lateral resolution obtained from continuous EM profiling data has been used to outline closely-spaced burial pits, to reveal the migration of contaminants into the surrounding soils, or to delineate complex fracture patterns (Benson, et al., 1982).

In addition to evaluation of natural hydrogeologic conditions and mapping of contaminant plumes, some of the electromagnetic instrumentation can be used to locate trench boundaries, buried wastes and drums, and metallic utility lines. Frequency-domain EM instruments provide two signal outputs consisting of an in-phase component and an out-of-phase component. The out-of-phase component is used to measure electrical conductivity and can be used to locate pipes. The in-phase component is a measure of the magnetic susceptibility, but it can also be used to detect both ferrous and nonferrous metal. For example, using the in-phase component, a single 55-gallon steel drum can be detected at a depth of about 6 to 8 feet.

Vertical variations in conductivity can be determined by sounding. Frequency domain sounding data can be acquired for depths ranging from 2.5 to 200 feet by combining data from a variety of commonly available frequency-domain EM instruments. The instrumentation is placed at one location and measurements are made at increasing depths by a changing coil orientation and/or coil spacing. The vertical resolution of frequency-domain EM soundings is relatively poor since only a limited number of measurements are made at only a few depths. However, they do provide a quick means of obtaining limited vertical information.

Some of the extremely low conductivity values or conductivities which become negative on the EM contour maps do not necessarily mean low or negative conductivity values but are in fact caused by:

- o The presence of buried metal in which case the in-phase component of the EM data will also be anomalous and/or;
- o The presence of a highly conductive media (such as a salt brine spill) which has exceeded the linear range of the EM31 response (conductivities greater than 400 mmhos/m) resulting in values much lower than actual.

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APPENDIX B

DESCRIPTION OF THE GROUND PENETRATING RADAR METHOD

Ground penetrating radar uses high frequency electromagnetic waves (from less than 100 MHz to slightly more than 1,000 MHz) to acquire subsurface information. Energy is radiated downward into the ground from a transmitter and is reflected back to a receiving antenna. Reflections of the radar waves occur whenever there is a change in the dielectric constant and/or electrical conductivity between two materials. Changes in conductivity and in dielectric properties are associated with natural geologic and/or hydrogeologic conditions such as bedding, cementation, moisture, clay content, voids, and fractures. Therefore, an interface between two soil or rock layers which has a sufficient contrast in electric properties will show up in the radar profile (Benson, et al., 1979; 1982; 1987).

The reflected signals are recorded and produce a continuous cross-sectional picture or profile of shallow subsurface conditions. The radar record is similar to the view we would get if we observed the cross-section of soils in a trench or a cross-section of rock at a road cut.

The vertical scale of the radar profile is in units of time, the time it takes for an electromagnetic wave to move down to a reflector and back to the surface (two-way travel time). The unit of time is nanoseconds (nanosecond = 10^{-9} second). This time is relatively short because the waves are travelling at almost the speed of light. Times are then converted to depth by relating measurements or assumptions about the velocity of the waves in the subsurface materials.

Depth of penetration of the radar wave is highly site-specific. Penetration depth is limited by attenuation due to the higher electrical conductivity, dielectric losses and/or scattering of subsurface materials. Generally, radar penetration is greater in coarser, dry, sandy soils or massive rock, and less penetration is obtained in wet, fine grained clayey (conductive) soils. Data may still be obtained from saturated materials if the specific conductance of the pore fluid is sufficiently low. For example, radar has been applied to map the sediments in fresh water lakes and rivers. While radar penetration in soil and rock to more than 100 feet has been reported, penetration of 15 to 30 feet is more typical. In silts and clays, penetration may be limited to a few feet or less. Yet, in some situations, useful results can be obtained in silts and clays (Benson, 1990). The water table can be detected in coarser grained materials but not in finer grained sediments with a large capillary boundary. Both metallic and nonmetallic buried pipes and drums can also be detected.

The continuous data produced by the radar method offers a number of advantages over some of the other geophysical methods. Continuous profiling permits data to be gathered much more rapidly, thereby providing a large amount of data for a given budget. In some cases, total site coverage of an area can be obtained. Radar data may be obtained at speeds up to 5 mph to 10 mph or more. Very high lateral resolution data can be obtained by towing the antenna(s) by hand at much slower speeds (less than 1 mph).

Radar has the highest resolution of all of the surface geophysical methods. Vertical resolution of radar data can range from less than an inch to several feet depending upon the depth and the electromagnetic wave frequency used. A variety of antennas can be selected to cover frequencies from less than 100 MHz to 1,000 MHz. Lower

frequencies provide greater depths of penetration, but lower resolution, and higher frequencies provide less penetration, but higher resolution.

The picture-like radar record allows for preliminary field analysis of radar data is possible using the picture-like record. Despite its simple graphic format, there are many pitfalls in the interpretation of radar data. There are multiple bands within the data due to ringing which may obscure layers and cause confusion in interpretation. If an unsoiled antenna is used, overhead reflections from trees or power lines may appear on the record (this is only a problem with lower frequency unsoiled antennas). System and geologic noise can sometimes clutter up the record, making interpretation difficult. Although radar can be recorded on magnetic media and processed by computer, the necessary geologic or hydrologic information can often be obtained from the raw graphic records.

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minimize any errors due to natural long period changes of the earth's field. Cultural noise, however, will remain a problem with total field measurements. Many of these problems can be avoided by use of gradiometer measurements and proper field techniques.

Gradiometer measurements are made by a gradiometer, which is simply two magnetic sensors separated vertically (or horizontally) by a few feet. Gradient measurements have a distinct advantage over total field measurements. They are insensitive to natural changes in the earth's magnetic field and minimize most cultural effects. Because the response of a gradiometer is the difference of two total field measurements and it responds only to the local gradient. It is also better able to locate a relatively small target, such as a buried drum.

The disadvantage of a gradiometer is that it is less sensitive than a total field instrument. A total field magnetometer's response is inversely proportional to the cube of the distance to the target (such as a drum). A gradiometer response is inversely proportional to the fourth power of the distance to the target (such as a drum), making it less sensitive than the total field measurement. While gradiometers are inherently less sensitive than total field instruments, they are also much less sensitive to many sources of noise. Under ideal conditions, a single drum can be readily detected at depths up to about 20 feet with a total field magnetometer and at depths of about 10 feet with a gradient magnetometer. Massive piles of drums can be detected at depths up to 50 feet or more with a total field magnetometer and at depths of about 25 feet with a gradient magnetometer.

Two types of magnetometer sensors are in common use, the proton and the fluxgate. A total field or gradient proton precession magnetometer normally requires the

- Appendix C Page 2 -

operator to stop to take a measurement. The operator then moves to the next station and repeats the measurement process. With a fluxgate gradiometer, continuous acquisition of data can be acquired as the magnetometer is moved across the site. Continuous coverage is much more suitable for very detailed (high resolution) surveys to identify local targets, such as unexploded ordnance, drums, and the mapping of areas in which complex anomalies are expected.

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Appendix D

Deviations from the Approved Work Plan and the Quality Assurance Program Plan

Deviations from the Approved Work Plan and the Quality Assurance Program Plan

The work performed for this ESI consistently followed the approved Work Plan and Quality Assurance Program Plan (QAPP) wherever possible. However, in several instances, field conditions or practical operational requirements dictated that approved deviations be made from the Work Plan or QAPP. This Appendix describes those deviations.

Monitoring Well Installation

- Where shallow wells could not be completed as per the work plan, wells were completed with deviations in well design approved by USATHAMA. The shallow wells where these deviations occurred were 91B14, 91B15, 91B18 and 91B19. In these instances, sand pack was brought to elevations of less than three feet above the screen. In addition, no more than two feet of bentonite was used above the sand pack.
- Wells that were slow to recharge were purged less than five well volumes. The number of well volumes was determined in such cases after consulting USATHAMA.

Geophysical Surveys

- The instrument used for the magnetometer survey was a Forester Ferex 4.021 Fluxgate gradiometer as opposed to an EDA Instruments Omni Plus gradiometer as discussed in the Work Plan and the QAPP.
- Ground penetrating radar (GPR) was used to confirm the location of the North TNT Burial Pit (SWMU #26) as well as the electromagnetic (EM) survey. There is no discussion of GPR surveys in the QAPP or the Work Plan.

Topographic Surveys

- Topographic surveys were not performed at SWMUs on which geophysical surveys were conducted. Survey grids were staked by TECHNOS personnel.
- Natural ground surface is not accessible at monitoring well locations due to placement of concrete pads around the protective casings. Ground elevation at each well was established on the pad at the base of the protective casing. Reference points are chiseled into the concrete.

Monitoring Well Purge-Water Disposal

Methods for the disposal of water extracted from groundwater monitoring wells for sampling purposes are not discussed in the QAPP. As approved by the Alabama Department of Environmental Management (ADEM), this purge water was disposed of in the Industrial Wastewater Treatment Plant located in the Southeast Industrial Area at ANAD (see attached ADEM approval letter).

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



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December 16, 1991

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Dear Mr. Grant:


This is in response to the letter received by the Department on December 2, 1991, in which the Anniston Army Depot requested approval to dispose of wastewaters derived from its groundwater investigations in its Industrial Waste Treatment Plant (IWTP). Additionally, approval was requested to place wastewaters containing levels of compounds which exceed toxic characteristic levels under RCRA into the IWTP.

Regarding the first request, the Department does not object to a limited quantity of these wastewaters being placed into the IWTP for treatment. The analyses of these waters submitted with your request do not indicate that they would pose a threat to the operation of the treatment facility. However, as was stated in the Department's letter of November 22, 1991, any long-term disposal of these wastewaters in this manner would require a modification of the Depot's NPDES permit.

As for the request regarding RCRA characteristic wastewater, the ADEM Land Division has indicated that it has no regulatory involvement with this disposal method since it occurs under an NPDES permit. Therefore, the Depot may utilize this method of disposal, provided that quantities of these wastewaters are limited and that their generation is on an intermittent basis. Also, the introduction of these wastewaters into the IWTP shall not cause interference with the treatment facilities or a violation of an instream water quality standard in the receiving stream.

Should you have any questions concerning this matter, please feel free to contact me at 271-7845.

Sincerely,


Phillip D. Davis
Industrial Branch
Water Division

cc: Kim Kennedy - Land Division
Joe Downey - Special Projects

Appendix E
Data Review and Validation

DATA REVIEW AND VALIDATION

As required by the approved ANAD Quality Control Plan (QCP), JEG has undertaken a review of the contractor laboratory data to assure that the data generated by the ESI are accurate and consistent with the project objectives. To this end, the reported data were comprehensively evaluated for accuracy, precision, representativeness, and completeness as described below.

Data generated during the ESI were retrieved from USAEC's Installation Restoration Data Management Information System (IRDMIS). IRDMIS is the minicomputer-based, relational database utilized by USAEC for chemical, physical, geologic, and geographical information. The USAEC-certified contractor laboratory utilized the analytical methods specified in the ANAD Quality Control Plan (QCP). Analytical results were submitted by the laboratory for entry into IRDMIS according to reporting protocols specified in the IRDMIS User's Manual (USATHAMA, 1991).

1.0 SAMPLE COLLECTION AND ANALYTIC DATA MANAGEMENT PROCEDURES

Samples collected for laboratory analysis were identified with a unique field sample number. The sample location, matrix sampled, date sampled, sampling technique, and sampling depth were also recorded for each environmental sample. Each sample was further identified by type (i.e., borehole, surface soil, etc). At the analytical laboratory, a unique number was assigned to each aliquot of a sample designated for a separate analysis. These identifying characteristics for each sample were also input into the IRDMIS data management system.

Laboratory data, quality control data and characteristic sample data were formatted for entry into the IRDMIS data management system. IRDMIS incorporates data quality checks to ensure that blanks, duplicates, matrix spike, matrix spike duplicate, and qualifying codes have been included with each lot of samples. Data are entered into IRDMIS before corrections for dilutions, percent moisture, and analysis accuracy. IRDMIS checks that reported values are within certified ranges. Accuracy values, based on percent recovery of specified analytes, are reported to IRDMIS for each data lot.

Chemical data are reported in IRDMIS utilizing abbreviations for analytes (Appendix G). If necessary, flagging codes (Table E-1) are assigned to data points. Boolean indicators may also be added to data points to indicate that a measured quantity is not within the certified range or the analytical method utilized does not yield quantitative results (Table E-2).

Table E-1 (Continued)

S	Results based on internal standard. This flagging code is to be used in conjunction with methods which use an internal standard. Compounds for which no certification data exist are quantitated by direct comparison to the internal standard. Cannot be used with a boolean, since there is (implied) quantitation.
T	Analyzed for but not detected. This flagging code is to be used for non-GC/MS multi-analyte methods to report compounds that are a normal part of the methodology but for which no certification data exists.
U	Analysis is unconfirmed. This flagging code is to be used when a conformational analysis is done but does not verify the analytical results obtained from the initial analysis.
V	Sample subjected to unusual storage conditions. This flagging code is to be used when the sample storage conditions may affect the analytical results.
W	Single analyte required from a multi-analyte method. This flagging code is to be used when only one analyte from a multi-analyte method is to be reported. This flagging code is useful when spiking solutions contain more than one analyte of interest for the method.
X	Analyte recovery outside of certified range but within acceptable limits. This flagging code is to be used when analyte recoveries exceed the upper limit of the certified range by less than 15% and the laboratory feels a dilution is not warranted.

*SOURCE: User's Guide Installation Restoration Data Management Information System, Volume II Data Dictionary

2.0 DATA PACKAGES REVIEW

The data packages supplied by the analytical laboratory were reviewed by JEG for completeness, adherence to reporting limits and control limits, holding time exceedances, and initial and continuing calibration requirements as outlined in the QCP. The laboratory data summaries are discussed below.

Silver: A below average trend in spike recovery was noted for analyses by USATHAMA method JC02 performed January 20 through January 30, 1993 for lots DAQ and DAR. The percent recovery of silver in the low spike averaged approximately 88%. The results are still within control limits. Spike recoveries for samples analyzed February 14 through 24, were trend free.

Inorganics by ICP: For samples in lots DRY, DRZ and HBA analyzed January 20, 1992 through January 28, 1992 with USATHAMA method JS14, above average three-day trends for spike recoveries were noted for Ba, Co, Cr, Mo, Ti, and Zn. A downward trend was noted for Cu. Sb was characterized by an extended-range below average trend. Some three day and single day control charts were out-of-control for Ba, Sb, Cd, Zn, and Pb for these lots. For lot DRY, the external calibration check was within two standard deviations for Ba, Pb, and Cd, but outside this limit for Cd and Zn. For lot DRZ, the external calibration check was within two standard deviations for Ba, Cu, Pb, and Sb. For lot HBA, the external calibration check was within two standard deviations for Ba, Cu, and Sb. Cd was not identified in any samples from lot DRY and Sb was not identified in any samples in lots DRY or DRZ. The out-of-control situations are unlikely to impact data except for barium. The samples impacted include soil samples from borings 91B12. Barium was detected in these samples at concentrations of less than 4.87 mg/kg to 30.9 mg/kg. Barium results for these samples may show a high bias.

For samples in lots HBF and HBG analyzed between February 24 and 26, 1992, the detected concentrations of Ba and Cr in the low spike for lot HBF were below certified reporting limits (CRLs). The Cr result was flagged as "P" to denote that it is between the criteria of detection (COD) and CRL. The Ba result was reported as less than (LT). Some one-day and three-day control charts were out of control for Ba, Cr, Cu, Ni, and Sb. The impact of the out-of-control situations is negligible except for Sb, whose average recovery in the low spike was 65% and Sb was not detected in any samples in these lots. The samples impacted include surface soil samples from S14S01, S14S02, S14S03, and S14S04. These samples may have a low bias for Sb.

control limits. Lot GOF analyzed for arsenic was out-of-control due to a low spike recovery in the previous lot (GOE) analyzed. Spike recovery in GOF was 97.2%. No arsenic was detected in samples in this lot.

Base, Neutral and Acid Extractables: For samples in lots DUT, DUU, and DUV analyzed January 24 through January 30, the three-day x-bar and range control charts for nitrobenzene-D5 were out-of-control. Lot DUT was out-of-control due to two low terphenyl-D14 spike recoveries. Average percent spike recoveries for nitrobenzene-D5 for these lots were 66.7, 73.3 and 73.3 percent, respectively. The percent recovery for terphenyl-D14 in lot DUT was 80%. This may impact samples from boring 91B12. Lots DUZ and HDA analyzed between February 12 and 17, 1992 were out-of-control for nitrobenzene-D5 recovery and phenol-D5 was out-of-control for lot DUZ. The percent recovery for nitrobenzene-D5 in the high spike was 56.7 and 66.7 respectively in these two lots. It is likely that there is a negligible impact on the environmental data. Lots HDC and HDD analyzed between February 18 and 29, 1992 were out-of-control for 2,4,6-tribromophenol and nitrobenzene-D5 recoveries. The percent recovery of nitrobenzene-D5 in the high spike was 66.7 and 56.7 for these two lots and the recovery of 2,4,6-tribromophenol in lot HDC was 66.7 percent. The impact of these low recoveries is likely to be negligible. The samples that may be impacted are surface soil samples S11S01, S11S02, S37S01, S37S03, and S37S05. For lot HDE, the control charts for nitrobenzene-D5 are out-of-control. The percent recovery for nitrobenzene-D5 was 66.7%. The impact of this out-of-control situation is likely to be negligible. Control charts for lots HDE, HDF, and HDG, analyzed March 6 to March 27, 1992, are out of control for nitrobenzene-D5. Lot HDG is out of control for 2,4,6-tribromophenol and phenol-D5. The percent recoveries of 2,4,6-tribromophenol, 2-fluorophenol, nitrobenzene-D5, and phenol-D5 in the high spike in lots HDE through HDG range from 80 to 86.7%, from 73.3 to 86.7%, from 66.7 to 86.7% and 80 to 100% respectively. These out-of-control situations are expected to have minimal impact on data useability. Lots GVA, GVC, GVD, GVE, and GVG through GVP analyzed for BNAs were all within control limits.

PCBs and pesticides: Lot DVP was analyzed within control limits by USATHAMA method LH19 on February 11, 1992. Lots DVR and DVS were also within control limits. The single day x-bar control chart for lindane was out of control in lot DVQ. Percent recoveries for control analytes in this lot were 53.6 to 70.7%. The impact of this out-of-control situation is negligible. Lots DVT and DVU were within control except for the single-day x-bar control chart for Endrin for lot DVT. The impact of this is also negligible.

3.1 ACCURACY

Accuracy is defined as the percent recovery of an analyte. The contract laboratory plotted the mean percent recovery and range of percent recovery on control charts prepared for each control analyte. Data from duplicate spiked QC samples were used to calculate percent recovery.

$$\% \text{ Recovery} = \text{Found Concentration} / (\text{Spiked Concentration} + \text{Sample Concentration})$$

The laboratory utilized percent recovery of each analyte in spiked QC samples, the average percent recovery, and the difference between the percent recovery of two spiked samples in a continuous assessment of method accuracy. A minimum of twenty data points were utilized to set upper and lower control limits for percent recovery. Control charts prepared for each lot of data were utilized to determine if data were within acceptable control limits for accuracy. Control chart summaries are discussed in the introduction to this section.

In addition, an analysis accuracy was calculated for USATHAMA Class 1 analytical methods based on found versus recovered analytes. Analysis accuracies expressed as analyte recoveries are discussed in the introduction to this section of the report. Analysis accuracies are reported with each applicable lot of data to USATHAMA. Concentrations reported in IRDMIS reflect the accuracy of each analytical method.

The recovery of analytes in natural matrix spike (MS) and matrix spike duplicate (MSD) samples were calculated for ASA samples (Table E-3). Above-average recoveries in natural matrix spikes indicate positive matrix interferences and a possible high bias in the data. Below-average recoveries in natural matrix spikes indicate negative matrix interferences. For the soil matrix, several inorganic analytes showed multiple recoveries of greater than 150%. This may indicate a positive matrix interference for barium and cadmium. No other trends in matrix interferences were noted.

Table E-3. Recovery of Analytes in Natural Matrix Spike Samples (Continued)

ELEMENT/COMPOUND	SAMPLE SITE ID	SAMPLE CONC (µg/g)	MATRIX SPIKE SAMPLE (µg/g)	MATRIX SPIKE DUPLICATE SAMPLE (µg/g)	LEVEL OF SPIKE (µg/g)	MS PERCENT RECOVERY D1 (%)	MSD RECOVERY D2 (%)	AVERAGE RECOVERY (%)
Copper	S5SD1	22.4	177	173	100	145	141	143
	S091B172	9.52	133	132	100	121	121	121
	S8SD4	33.9	143	138	100	107	103	105
	S091B17	8.5	130	132	100	120	122	121
Manganese	S5SD1	600	620	570	100	89	92	90
Molybdenum	S5SD1	LT 4.0	1080	1090	640	169	170	170
	S091B172	LT 4.0	879	872	640	137	136	136
	S8SD4	LT 4.0	934	933	640	146	146	146
	S091B17	LT 4.0	866	777	640	135	121	128
Nickel	S091B172	11.6	1340	1340	1000	132	132	132
	S8SD4	28.9	1580	1550	1000	154	151	152
	S091B17	LT 7.5	1380	1350	1000	138	135	136
Lead	S091B172	17.2	538	549	400	129	132	130
	S8SD4	24	625	627	400	147	148	148
	S091B17	38.4	558	549	400	127	125	126
Antimony	S091B172	LT 82	4860	5030	5000	97	101	99
	S8SD4	LT 82	6020	5900	5000	120	118	119
	S091B17	LT 82	4810	4430	5000	96	89	92
Selenium	S091B172	LT 12.5	3010	3050	2500	120	122	121
	S8SD4	LT 12.5	3680	3680	2500	147	147	147
	S091B17	LT 12.5	3940	3140	2500	122	126	124
Thallium	S091B172	LT 12.5	3240	3180	2500	130	127	128
	S8SD4	LT 12.5	3550	3470	2500	142	139	140
	S091B17	LT 12.5	3120	3120	2500	125	125	125
Zinc	S5SD1	422	2100	1980	1000	148	139	144
	S091B172	32.9	1340	1330	1000	130	129	130
	S8SD4	87.3	1620	1620	1000	149	149	149
	S091B17	40.9	1410	1410	1000	135	135	135

3.2 PRECISION

Precision is defined as the relative percent difference between duplicate samples. Relative percent difference (RPD) is defined:

$$RPD = 100 \times (D_1 - D_2) / [(D_1 + D_2) / 2]$$

RPD =Relative Percent Difference

D₁ =Characteristic Sample

D₂ =Duplicate Sample

The agreement between matrix spikes and matrix spike duplicate samples was utilized to assess laboratory precision. Analytical data are checked before acceptance into IRDMIS for adequate precision based on matrix spike/matrix spike duplicate results. Field duplicates assess the precision of field sampling techniques and spatial variability of contamination. RPD for field duplicates will also be affected by the precision achieved in the laboratory. Environmental variability decreases the degree of precision possible between field duplicates over the precision that is expected from laboratory duplicates.

Two groundwater matrix samples were used to assess the degree of precision achieved for field duplicate sample collection. Not all analytes were detected in these duplicates. Detected analytes are presented in Table E-4.

Table E-4. Degree of Precision — Groundwater

Element/Compound	SAMPLE NOS.	RPD (%)
Nitrate	91B15/91B15D	5.8
Nitrate	91B18/91B18D	18.0
Acetone	91B15/91B15D	5.7
Acetone	91B18/91B18D	—
Lead	91B18/91B18D	16.2
Lead (lab duplicate)	91B18D	3.5
Aluminum	91B18/91B18D	5.0
Barium	91B18/91B18D	4.9
Calcium	91B18/91B18D	2.4
Cobalt	91B18/91B18D	16.4
Chromium	91B18/91B18D	25.0
Copper	91B18/91B18D	0.0

The RPD was relatively high for several analytes, i.e., barium, chromium, potassium, magnesium, and manganese, indicating that a greater environmental variability exists for the soil matrix, and perhaps a greater degree of variability is introduced through sampling the sediment matrix.

There were no soil matrix field duplicate samples collected to assess the degree of precision achieved between field duplicates.

A limited number of samples were available to assess the precision between field duplicates. In general, the relative percent difference between field duplicates was considerably higher (lower precision) than between lab duplicates indicating a considerable degree of environmental variability.

3.3 REPRESENTATIVENESS

Representativeness is defined as the degree with which the data collected accurately and precisely characterize the media being sampled. Sampling protocols specified in the field sampling plan were designed to ensure the collection of representative samples. Blank samples were collected to assess the impact of sample collection, preparation, and decontamination procedures on analytical results. Trip blanks, consisting of laboratory reagent water placed in VOC sample containers, accompanied each shipment of samples for VOC analysis to determine if contamination detected may have been introduced during sample handling, shipment, or storage.

Equipment rinse blanks were prepared by pouring analyte-free water through a decontaminated sample collection device and collecting the water in sample containers. Equipment rinse blanks were analyzed for parameters similar to those of the related samples collected by the sampling device.

Fourteen rinse blanks were collected and analyzed. The following elements and compounds were detected in equipment rinse samples: Al, Ba, Ca, Fe, Mn, Pb, TOC, TRCLE, and Zn. Aluminum was detected in the majority of the rinse samples at concentrations between 157 and 276 $\mu\text{g/l}$. Calcium was detected in all samples at concentrations between 3370 and 9480 $\mu\text{g/l}$. Zinc, manganese, barium, and iron were detected in multiple samples at maximum concentrations of 847, 44.2, 66.5, and 219 $\mu\text{g/l}$, respectively. Lead, TOC and TRCLE were each detected in one rinse sample at 4.28, 9.51, and 5.3 $\mu\text{g/l}$ respectively. Additional equipment rinse sample analyses included: four for PCBs, four for explosives, and nine for BNAs. No contaminants were detected by these analyses.

All analytes detected in rinse blanks were also detected in the corresponding environmental samples. Most of the contamination found in CQC rinse blanks is inorganic and is presumably the result of residuals remaining on field equipment after decontamination. Levels detected are very low and are considered to be unlikely to influence subsequent samples to an unacceptable degree.

Deviations from work plan requirements were noted and accounted for. Upon completion of this process, analytical results in the IRDMIS data base were compared to those required by the chain of custody to establish that results for all samples taken were indeed in the data base. The result of this process is summarized in Table E-7. Completeness of the suites of analyses performed was confirmed in the generation of Tables 5-5 through 5-9 of the ESI report. In the course of this process, deficiencies in the IRDMIS data set were noted.

Based on this process, the following are established:

- All differences between samples required in the work plan and those actually collected in the field are accounted for by decisions made as a result of field conditions, or inability to locate a SWMU site.
- In some cases, samples were collected and analyzed in excess of work plan requirements (i.e., more samples were collected than the minimum required, or analyses not specified were performed).
- In only two cases were an analysis or suite of analyses required by work plan and chain of custody not reported by the analytical lab in IRDMIS: Pesticides/PCBs for groundwater sample number W2-17 and TOC for subsurface soil sample number 91B12.
- The following required correction in the IRDMIS Data Base:

Media File Code: CSO

- Site ID number 91B02 with Field Sample numbers S091B12 and S091B12C should read 91B12.
- Site ID numbers S14S01, S14S02, S14S03, S14S04, S15S01, S15S02 with Site Type BORE should read SURF.
- Site ID number S10B1 with Field Sample numbers S10B11-C, S10B12-C, S10B13-C, S10B14-C, and S10B16-C should read 91B11C. In addition, all site ID's labeled 91B11 should read 91B11C.
- Field Sample Number S10B11-C with Test Name NIT and Depth reading 0.500 should read 0.00.
- Site ID number 91B11D with Field Sample number S091B110 and depth 0.500 should read 0.00.
- For consistency and to facilitate computer searches of the database, all Sample ID and Field Sample numbers containing the letter "O" should read the numeral zero, "0".

Media File Code: CSE

- Site ID numbers S27S01 and S27S02 should be moved to Media File Code CSO/Site Type SURF.
- Site ID number S35S01 should be moved to Media Code CSO/Site Type SURF.

Media File Code: CGW

- Site ID number 91B23 with Depth reading 8.00 should read 6.00.

These corrections have been made.

Table E-7 (Continued)

SWMU NO. — NAME	ENVIRONMENTAL MEDIA	NUMBER OF SAMPLES	TCL VOC	TCL SVOC	TPH	TOC	NITRATES	TAL ELEMENTS	TCL PEST/ PCBs	EXPLOSIVES
15—PROPELLANT DISPOSAL FACILITY	GROUNDWATER	2-2-3	I 2-2-3	I 2-2-3	I		2-2-3	I		
	SURFACE WATER									
	SUB-SURFACE SOIL	10-6-6	J		2-2-3	I	10-6-6	J		
	SURFACE-SOIL	2-2-3	I		2-2-3	I				
	SEDIMENT									
16—BURNING GROUND	GROUNDWATER	2-2-2	2-2-2	2-2-2			2-2-2	2-2-2		2-2-2
	SURFACE WATER									
	SUB-SURFACE SOIL	10-8-8	K		2-2-2			10-8-8	K	10-8-8
	SURFACE-SOIL	4-4-4			4-4-4			4-4-4		4-4-4
	SEDIMENT									
17—DEMOLITION PIT	GROUNDWATER	2-2-3	I 2-2-3	I 2-2-3	I		2-0-3	I, M 2-2-3	I	2-2-3
	SURFACE WATER									
	SUB-SURFACE SOIL	10-4-4	L		2-4-4	F		10-4-4	L	10-4-4
	SURFACE-SOIL	2-2-2			2-2-2			2-2-2		2-2-2
	SEDIMENT	2-2-2			2-2-2			2-2-2		2-2-2
26—NORTH TNT BURIAL PIT	GROUNDWATER	2-2-2	2-2-2	2-2-2			2-0-2	M 2-2-2		2-2-2
	SURFACE WATER									
	SUB-SURFACE SOIL	2-3-4	N 2-3-4	N 2-3-4				2-3-4	N	2-3-4
	SURFACE-SOIL	2-2-2						2-2-2		2-2-2
	SEDIMENT	1-1-1						1-1-1		1-1-1

Table E-7 (Continued)

A	—	PCBPesticide analysis of sample not reported in IRDMIS.
B	—	Site of SWMU 8 not located; no Work-Plan-required-samples taken.
C	—	Four sediments samples collected near presumed location of SWMU 8; not required by Work Plan; one sample was split by analytical lab and duplicate analyses were performed.
D	—	Samples from 6 depths at failed well 91B11 were submitted for analyses in excess of Work Plan requirements; samples from 5 intervals designated were taken from the boring in which well 91B11 was completed and are labeled 91B11D.
E	—	Wells AAD14, AAD15, 2-19 and 2-20 were not serviceable or not located.
F	—	Analyses requested on Chain of Custody in excess of Work Plan requirements.
G	—	Samples taken at 6 depths in boring 91B12 vice 5 required by Work Plan.
H	—	TOC analysis on sample 91B12 not included in IRDMIS database.
I	—	Lab replicate or field duplicate on one sample.
J	—	Shallow depth of water table resulted in 2 fewer samples at each of wells 91B14 and 91B15 than maxima required by Work Plan.
K	—	Shallow water tables at borings 91B16 and 91B17 resulted in fewer sample at each than maximum required by Work Plan.
L	—	Only one sample taken at boring 91B18 and 3 at 91B19 because of shallow water table.
M	—	Analysis for NIT, not required by COC, performed by Lab.
N	—	One sample in excess of Work Plan requirement taken at boring 91B21. One field duplicate was also taken at 91B21.
O	—	Two samples each collected from 91B22 and 91B23.
P	—	One sample location was found to be dry and no sample was collected.

REFERENCES

USATHAMA (1991) User's Manual The Installation Restoration Data Management Information System, Potomac Research, Inc., Aberdeen Proving Ground, MD.

Jacobs Engineering (1991) Anniston Army Depot Quality Control Plan, Washington, D.C.

U.S. EPA (1988) Functional Guidelines for Evaluating Organics Analyses.

U.S. EPA (1988) Functional Guidelines for Evaluation Inorganics Analyses.

USATHAMA (1990) Quality Assurance Program, Aberdeen Proving Ground, MD.

Appendix F
Surface Soil Data

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S10S01	S10S01	0.5	03-FEB-92	PC	37575	99 /S JS14/S	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
								Aluminum		5130	UGG		
							7429-90-5	Iron		9300	UGG		
							7439-89-6	Lead	LT	10	UGG		
							7439-92-1	Magnesium		242	UGG		
							7439-95-4	Manganese		120	UGG		
							7439-98-7	Molybdenum		4	UGG		
							7440-02-0	Nickel	LT	7.5	UGG		
							7440-09-7	Potassium	LT	208	UGG		
							7440-23-5	Sodium	LT	50	UGG		
							7440-28-0	Thallium	LT	12.5	UGG		
							7440-36-0	Antimony	LT	82.9	UGG		
							7440-38-2	Arsenic	ND	12.7	UGG	T	
							7440-39-3	Barium		21.4	UGG		
							7440-41-7	Beryllium	LT	.25	UGG		
							7440-43-9	Cadmium	LT	.427	UGG		
							7440-47-3	Chromium		9.59	UGG		
							7440-48-4	Cobalt		4.75	UGG		
							7440-50-8	Copper	LT	3.38	UGG		
							7440-62-2	Vanadium		19.6	UGG		
							7440-66-6	Zinc		15.1	UGG		
							7440-70-2	Calcium		1300	UGG		
							7782-49-2	Selenium	LT	12.4	UGG		
S10S01		S10S01	0.5	03-FEB-92	PC	37575	00 /S	Total organic carbon		10400	UGG		
						JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
						JC02/S	7440-22-4	Silver	LT	1.01	UGG		
						KY04/	57-12-5	Cyanide	LT	1.22	UGG		
						LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
							121-14-2	2,4-Dinitrotoluene					
							121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.251	UGG		K
							2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
							479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
							55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
							606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
							78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		K
							88-72-2	2-Nitrotoluene	LT	.505	UGG		K
							99-08-1	3-Nitrotoluene	LT	.251	UGG		K
							99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S10S01	S10S01	0.5	03-FEB-92	PC 37575		LW32/S	99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								14797-55-8	Nitrite, nitrate - nonspecific		4.14	UGG		
								7429-90-5	Aluminum		3650	UGG		
								7439-89-6	Iron		9600	UGG		
								7439-92-1	Lead		20.4	UGG		
								7439-95-4	Magnesium		462	UGG		
								7439-96-5	Manganese		400	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	236	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		24.7	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		10.9	UGG		
								7440-48-4	Cobalt		5.54	UGG		
								7440-50-8	Copper		8.68	UGG		
								7440-62-2	Vanadium		20.8	UGG		
								7440-66-6	Zinc		28.9	UGG		
								7440-70-2	Calcium		1910	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
									Total organic carbon		17900	UGG		
									Mercury	LT	8.70 E -2	UGG		
									Silver	LT	1.01	UGG		
									Cyanide	LT	1.22	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene		1.28	UGG	C	K
									2,4-Dinitrotoluene	LT	.251	UGG		K
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
									Cyclotetramethylenetetranitramine	LT	.499	UGG		K
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
									Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
									2,6-Dinitrotoluene	LT	.5	UGG		K
									PETN / Pentaerythritol tetranitrate /	LT	2.5	UGG		K
									2,2-Bis[(nitrooxy)me*]					
									2-Nitrotoluene	LT	.505	UGG		K
									3-Nitrotoluene	LT	.251	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Unit Meas.	Flag Codes	Data Quals
SURF	S10S02	S10S02	0.5	03-FEB-92	PC	37583	LW32/S	99-35-4	1,3,5-Trinitrobenzene	LT	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	UGG		K
								99-99-0	4-Nitrotoluene	LT	UGG		K
								7429-90-5	Aluminum		UGG		
								7439-89-6	Iron		UGG		
								7439-92-1	Lead	LT	UGG		
								7439-95-4	Magnesium		UGG		
								7439-96-5	Manganese		UGG		
								7439-98-7	Molybdenum		UGG		
								7440-02-0	Nickel	LT	UGG		
	S11S01	S11S01	0.5	04-FEB-92	PC	37486	JS14/S	7440-09-7	Potassium		UGG		
								7440-23-5	Sodium	LT	UGG		
								7440-28-0	Thallium	LT	UGG		
								7440-38-2	Arsenic	ND	UGG		
								7440-39-3	Barium		UGG		
								7440-41-7	Beryllium	LT	UGG		
								7440-43-9	Cadmium		UGG		
								7440-47-3	Chromium		UGG		
								7440-48-4	Cobalt		UGG		
								7440-50-8	Copper		UGG		
	S11S01	S11S01	0.5	04-FEB-92	PC	37486	00 /S	7440-62-2	Vanadium		UGG		
								7440-66-6	Zinc		UGG		
								7440-70-2	Calcium		UGG		
								7782-49-2	Selenium	LT	UGG		
									Total organic carbon		UGG		
								14797-55-8	Nitrite, nitrate - nonspecific	ND	UGG		
								7440-36-0	Antimony	ND	UGG		
								7439-97-6	Mercury	LT	UGG		
								7440-22-4	Silver	LT	UGG		
								57-12-5	Cyanide	LT	UGG		
	S11S01	S11S01	0.5	04-FEB-92	PC	37486	LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	UGG		K
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	UGG		K
								88-72-2	2-Nitrotoluene	LT	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

11:11:15

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Unit Meas.	Flag Codes	Data Quals
SURF	S11S01	S11S01	0.5	04-FEB-92	PC 37486		LU32/S	99-08-1	3-Nitrotoluene	LT	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	UGG		K
								99-99-0	4-Nitrotoluene	LT	UGG		K
									Total organic carbon		UGG		
							00 /S	14797-55-8	Nitrite, nitrate - nonspecific	ND	UGG	T	
								99 /S	Antimony	ND	UGG	T	
								7440-36-0	Mercury	LT	UGG		
								7439-97-6	Silver	LT	UGG		
								7440-22-4	Cyanide	LT	UGG		
								57-12-5	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	UGG		K
								118-96-7	2,4-Dinitrotoluene	LT	UGG		K
								121-14-2	RD / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	UGG		K
								121-82-4	Cyclotetramethylenetetranitramine	LT	UGG		K
								2691-41-0	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	UGG		K
								479-45-8	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	UGG		K
								55-63-0	2,6-Dinitrotoluene	LT	UGG		K
								606-20-2	PEIN / Pentaerythritol tetranitrate /	LT	UGG		K
								78-11-5	2,2-Bis[(nitrooxy)me*]	LT	UGG		K
								88-72-2	2-Nitrotoluene	LT	UGG		K
								99-08-1	3-Nitrotoluene	LT	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	UGG		K
								99-99-0	4-Nitrotoluene	LT	UGG		K
									Total organic carbon		UGG		
								14797-55-8	Nitrite, nitrate - nonspecific	ND	UGG	T	
								99 /S	Mercury	LT	UGG		
								7439-97-6	Silver	LT	UGG		
								7440-22-4	Aluminum	LT	UGG		
								7429-90-5	Iron	LT	UGG		
								7439-89-6	Lead	LT	UGG		
								7439-92-1	Magnesium		UGG		
								7439-95-4	Manganese		UGG		
								7439-96-5	Molybdenum	LT	UGG		
								7439-98-7	Nickel	LT	UGG		
								7440-02-0	Potassium	LT	UGG		
								7440-09-7	Sodium	LT	UGG		
								7440-23-5	Thallium	LT	UGG		
								7440-28-0	Antimony	LT	UGG		
								7440-36-0	Arsenic	ND	UGG	T	
								7440-38-2			UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S11S02	S11S02	0.5	04-FEB-92	PC 37516		JS14/S	7440-39-3	Barium		10.4	UGG		
								7440-41-7	Beryllium		.411	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		21.4	UGG		
								7440-48-4	Cobalt		10.4	UGG		
								7440-50-8	Copper		20.8	UGG		
								7440-62-2	Vanadium		43.6	UGG		
								7440-66-6	Zinc		28.4	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
S11S0R	S11S0R	S11S0R	0.5	04-FEB-92	PC 37494		JS14/S	7429-90-5	Aluminum		6100	UGG		
								7439-89-6	Iron		27000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		285	UGG		
								7439-96-5	Manganese		87.8	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	12.5	UGG		
								7440-09-7	Potassium		594	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		8.83	UGG		
								7440-41-7	Beryllium		.559	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		19.6	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S14S01	S14S01	0.5	31-JAN-92	PC	34541	LW32/S	78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis(nitrooxy)me*	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
	S14S02	S14S02	0.5	31-JAN-92	PC	34550	J806/S JS14/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		K
								7429-90-5	Aluminum		2150	UGG		
								7439-89-6	Iron		69000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		39.7	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		11.7	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		8.26	UGG		
								7440-48-4	Cobalt	LT	2.5	UGG		
								7440-50-8	Copper		6.19	UGG		
								7440-62-2	Vanadium		17.5	UGG		
								7440-66-6	Zinc		18	UGG		
								7440-70-2	Calcium		474	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
	S14S02	S14S02	0.5	31-JAN-92	PC	34550	00 /S		Total organic carbon		5720	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

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Installation :Anniston AD, AL (AN)
File Type: CSO

Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S14S02	S14S02	0.5	31-JAN-92	PC 34550		LW32/S	78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis((nitrooxy)methyl)-2,3-dinitrobutane	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								7439-97-6	Mercury	LT	8.70 E -2	UGG		K
								7429-90-5	Aluminum		3270	UGG		
								7439-89-6	Iron		14000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		29.5	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	228	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium	LT	4.87	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		10.3	UGG		
								7440-48-4	Cobalt		5.92	UGG		
								7440-50-8	Copper		15.6	UGG		
								7440-62-2	Vanadium		27.1	UGG		
								7440-66-6	Zinc		40.9	UGG		
								7440-70-2	Calcium		128	UGG	1	
								7782-49-2	Selenium	LT	12.4	UGG		K
									Total organic carbon		5840	UGG		
									Silver	LT	1.01	UGG		K
									Cyanide	LT	1.22	UGG		K
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
									2,4-Dinitrotoluene	LT	.251	UGG		K
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
									Cyclotetramethylenetetranitramine	LT	.499	UGG		K
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine *	LT	1.27	UGG		K
									Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
									2,6-Dinitrotoluene	LT	.5	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S14S03	S14S03	0.5	31-JAN-92	PC 34568		LW32/S	78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me* 2-Nitrotoluene	LT	2.5	UGG		K
								88-72-2	3-Nitrotoluene	LT	.505	UGG		K
								99-08-1	1,3,5-Trinitrobenzene	LT	.251	UGG		K
								99-35-4	1,3-Dinitrobenzene	LT	.25	UGG		K
								99-65-0	4-Nitrotoluene	LT	.249	UGG		K
								99-99-0	Mercury	LT	.245	UGG		K
								7439-97-6		LT	8.70 E -2	UGG		K
S14S04	S14S04	S14S04	0.5	31-JAN-92	PC 34576		JB06/S JS14/S	7429-90-5	Aluminum		5260	UGG		
								7439-89-6	Iron		24000	UGG		
								7439-92-1	Lead		13.6	UGG		
								7439-95-4	Magnesium		219	UGG		
								7439-96-5	Manganese		67.6	UGG		
								7439-98-7	Molybdenum		8.46	UGG		
								7440-02-0	Nickel		21.3	UGG		
								7440-09-7	Potassium		389	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		7.42	UGG		
								7440-41-7	Beryllium	LT	.828	UGG		
								7440-43-9	Cadmium		.427	UGG		
								7440-47-3	Chromium		14.2	UGG		
								7440-48-4	Cobalt		12.9	UGG		
								7440-50-8	Copper		30	UGG		
								7440-62-2	Vanadium		43.3	UGG		
								7440-66-6	Zinc		92.2	UGG		
								7440-70-2	Calcium		155	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
S14S04	S14S04	S14S04	0.5	31-JAN-92	PC 34576		00 /S		Total organic carbon		3360	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

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Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals	
SURF	S14S04	S14S04	0.5	31-JAN-92	PC	34576	LW32/S	78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		K	
									2-Nitrotoluene	LT	.505	UGG	K		
									3-Nitrotoluene	LT	.251	UGG	K		
									1,3,5-Trinitrobenzene	LT	.25	UGG	K		
									1,3-Dinitrobenzene	LT	.249	UGG	K		
									4-Nitrotoluene	LT	.245	UGG	K		
									Total petroleum hydrocarbons		28.3	UGG			
									Total petroleum hydrocarbons		108	UGG			
									Total petroleum hydrocarbons		107	UGG		D	
									Aluminum		6000	UGG			
								7429-90-5	Iron		26000	UGG			
									7439-89-6	Lead		203	UGG		
									7439-92-1	Magnesium		427	UGG		
									7439-95-4	Manganese		780	UGG		
									7439-98-7	Molybdenum		4	UGG		
									7440-02-0	Nickel	LT	9.54	UGG		1
									7440-09-7	Potassium		201	UGG		
									7440-23-5	Sodium	LT	50	UGG		
									7440-28-0	Thallium	LT	12.5	UGG		
									7440-38-2	Arsenic	ND	12.7	UGG		T
								7440-39-3	Barium		925	UGG			
									7440-41-7	Beryllium	LT	.25	UGG		
									7440-43-9	Cadmium		2.34	UGG		
									7440-47-3	Chromium		23.5	UGG		
									7440-48-4	Cobalt		16.3	UGG		
									7440-50-8	Copper		82.5	UGG		
									7440-62-2	Vanadium		27.3	UGG		
									7440-66-6	Zinc		648	UGG		
									7440-70-2	Calcium		763	UGG		
									7782-49-2	Selenium	LT	12.4	UGG		
						LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG				
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG			
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG			
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG			
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG			
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG			
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG			
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG			

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S16S01	S16S01	0.5	01-FEB-92	PC	36587	LW32/S	88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
	S16S01	S16S01	0.5	01-FEB-92	PC	36587	00 / S		Total petroleum hydrocarbons		.249	UGG		
							99 /	7440-36-0	Antimony	ND	82.9	UGG	T	
							J806/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
							JS14/S	7429-90-5	Aluminum		15000	UGG		
								7439-89-6	Iron		26000	UGG		
								7439-92-1	Lead		43.7	UGG		
								7439-95-4	Magnesium		466	UGG		
								7439-96-5	Manganese		7100	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	84.4	UGG		
								7440-09-7	Potassium		771	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG		
								7440-39-3	Barium	ND	622	UGG		
								7440-41-7	Beryllium		.442	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		15.6	UGG		
								7440-48-4	Cobalt		90.8	UGG		
								7440-50-8	Copper		84.1	UGG		
								7440-62-2	Vanadium		44.4	UGG		
								7440-66-6	Zinc		161	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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 Installation :Anniston AD, AL (AN)
 File Type: CSO
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S16S02	S16S02	0.5	01-FEB-92	PC	36609	LW32/S	88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
									Total petroleum hydrocarbons		589	UGG		
								7440-36-0	Antimony	ND	82.9	UGG	T	
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
S16S03	S16S03	S16S03	0.5	01-FEB-92	PC	36617	JS14/S	7429-90-5	Aluminum		16000	UGG		
								7439-89-6	Iron		20000	UGG		
								7439-92-1	Lead		31.4	UGG		
								7439-95-4	Magnesium		582	UGG		
								7439-96-5	Manganese		290	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	391	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG		
								7440-39-3	Barium	ND	33.1	UGG	T	
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		16.7	UGG		
								7440-48-4	Cobalt		16.3	UGG		
								7440-50-8	Copper		17.9	UGG		
								7440-62-2	Vanadium		36.9	UGG		
								7440-66-6	Zinc		141	UGG		
								7440-70-2	Calcium	LT	109	UGG		
							LW32/S	7782-49-2	Selenium	LT	12.4	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S16S03	S16S03	0.5	01-FEB-92	PC 36617		LW32/S	88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
	S16S03	S16S03	0.5	01-FEB-92	PC 36617		00 /S		Total petroleum hydrocarbons	LT	460	UGG		
							99 /	7440-36-0	Antimony	ND	82.9	UGG	T	
							JB06/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
							JS14/S	7429-90-5	Aluminum	LT	9200	UGG		
	S16S04	S16S04	0.5	01-FEB-92	PC 36595			7439-89-6	Iron	UGG	24000	UGG		
								7439-92-1	Lead	UGG	64.1	UGG		
								7439-95-4	Magnesium	LT	338	UGG		
								7439-96-5	Manganese	LT	.511	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	UGG	566	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium	UGG	23.6	UGG		
								7440-41-7	Beryllium	UGG	.42	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium	UGG	13.3	UGG		
								7440-48-4	Cobalt	UGG	15.8	UGG		
								7440-50-8	Copper	UGG	20.9	UGG		
								7440-62-2	Vanadium	UGG	40.5	UGG		
								7440-66-6	Zinc	UGG	73.4	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*	LT	2.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S16S04	S16S04	0.5	01-FEB-92	PC	36595	LW32/S	88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
									Total petroleum hydrocarbons		658	UGG		
								7440-36-0	Antimony	ND	82.9	UGG	T	
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
S17S01	S17S01	S17S01	0.5	01-FEB-92	PC	36676	JS14/S	7429-90-5	Aluminum		3010	UGG		
								7439-89-6	Iron		50000	UGG		
								7439-92-1	Lead		41	UGG		
								7439-95-4	Magnesium		265	UGG		
								7439-96-5	Manganese		119	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	24.6	UGG		
								7440-09-7	Potassium		487	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		9.25	UGG		
								7440-41-7	Beryllium		2.42	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		17.2	UGG		
								7440-48-4	Cobalt		19.6	UGG		
								7440-50-8	Copper		30	UGG		
								7440-62-2	Vanadium		72.6	UGG		
								7440-66-6	Zinc		212	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S17S01	S17S01	0.5	01-FEB-92	PC	36676	LW32/S	78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
									2-Nitrotoluene	LT	.505	UGG		
									3-Nitrotoluene	LT	.251	UGG		
									1,3,5-Trinitrobenzene	LT	.25	UGG		
									1,3-Dinitrobenzene	LT	.249	UGG		
									4-Nitrotoluene	LT	.245	UGG		
									Total petroleum hydrocarbons		55.6	UGG		
									Antimony	ND	82.9	UGG		
									Silver	LT	1.01	UGG		
									Aluminum		4230	UGG		
									Iron		18000	UGG		
									Lead		24.1	UGG		
									Magnesium		207	UGG		
									Manganese		196	UGG		
									Molybdenum		4	UGG		
									Nickel	LT	15.4	UGG		
									Potassium		372	UGG		
									Sodium	LT	50	UGG		
									Thallium	LT	12.5	UGG		
									Arsenic	ND	12.7	UGG		
									Barium		21.2	UGG		
									Beryllium		.542	UGG		
									Cadmium		7.36	UGG		
									Chromium		15.5	UGG		
									Cobalt		13.5	UGG		
									Copper		438	UGG		
									Vanadium		26.2	UGG		
									Zinc		220	UGG		
									Calcium	LT	109	UGG		
									Selenium	LT	12.4	UGG		
									Cyanide	LT	1.22	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene		.25	UGG		
									2,4-Dinitrotoluene		.448	UGG		
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									Cyclotetramethylenetetranitramine	LT	.499	UGG		
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									Nitroglycerine / 1,2,3-Propanetriol trinitrate		17.6	UGG		
									2,6-Dinitrotoluene	LT	.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
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* - Analyte Description has been truncated. See Data Dictionary

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Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

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 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quats
SURF	S26S02	S26S02	0.5	02-FEB-92	PC	36900	LU32/S	78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								7440-36-0	Antimony	ND	82.9	UGG	T	
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7439-90-5	Aluminum		18000	UGG		
								7439-89-6	Iron		19000	UGG		
S27S01	S27S01	S27S01	0.5	02-FEB-92	PC	36927	JS14/S	7439-92-1	Lead		47.4	UGG		
								7439-95-4	Magnesium		735	UGG		
								7439-96-5	Manganese		360	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	422	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		41.7	UGG		
S27S02	S27S02	S27S02	0.5	02-FEB-92	PC	36935	JS14/S	7440-41-7	Beryllium	LT	.408	UGG		
								7440-43-9	Cadmium		25.5	UGG		
								7440-47-3	Chromium		16.6	UGG		
								7440-48-4	Cobalt		7.47	UGG		
								7440-50-8	Copper		37	UGG		
								7440-62-2	Vanadium		34.1	UGG		
								7440-66-6	Zinc		374	UGG		
								7440-70-2	Calcium	LT	12.4	UGG		
								7782-49-2	Selenium		15000	UGG		
								7429-90-5	Aluminum		17000	UGG		
S27S02	S27S02	S27S02	0.5	02-FEB-92	PC	36935	JS14/S	7439-89-6	Iron		20.9	UGG		
								7439-92-1	Lead		678	UGG		
								7439-95-4	Magnesium		320	UGG		
								7439-96-5	Manganese		4	UGG	1	
								7439-98-7	Molybdenum	LT	9.76	UGG		
								7440-02-0	Nickel		413	UGG		
								7440-09-7	Potassium	LT	50	UGG		
								7440-23-5	Sodium	LT	12.5	UGG		
								7440-28-0	Thallium	LT	12.7	UGG	T	
								7440-38-2	Arsenic	ND	51.7	UGG		
S27S02	S27S02	S27S02	0.5	02-FEB-92	PC	36935	JS14/S	7440-39-3	Barium		.419	UGG		
								7440-41-7	Beryllium	LT	.427	UGG		
								7440-43-9	Cadmium			UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation - Anniston AD, AL (AN)
File Type: CSO
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* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S27S02	S27S02	0.5	02-FEB-92	PC 36935		LW32/S	78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis((nitrooxy)me* 2-Nitrotoluene 3-Nitrotoluene 1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 4-Nitrotoluene	LT	2.5	UGG		K
								88-72-2			.505	UGG		K
								99-08-1			.251	UGG		K
								99-35-4			.25	UGG		K
								99-65-0			.249	UGG		K
								99-99-0			.245	UGG		K
								57-12-5			1.22	UGG		K
								7429-90-5			5600	UGG	D	
								7439-89-6			13000	UGG		
								7439-92-1			9100	UGG		
								7439-95-4			59000	UGG		
								7439-96-5			175	UGG		
								7440-02-0			4	UGG		
								7440-09-7			7.5	UGG		
								7440-23-5			543	UGG		
								7440-28-0			96.6	UGG		
								7440-38-2			12.5	UGG		
								7440-39-3			12.7	UGG		
								7440-41-7			954	UGG		
								7440-43-9			.25	UGG		
								7440-47-3			20.4	UGG		
								7440-48-4			16.8	UGG		
								7440-50-8			7.95	UGG		
								7440-62-2			422	UGG		
								7440-66-6			15.3	UGG		
								7440-70-2			607	UGG		
								7782-49-2			1.0 E 5	UGG		
								7429-90-5			12.4	UGG		
								7439-89-6			7500	UGG		
								7439-92-1			30000	UGG		
								7439-95-4			1200	UGG		
								7439-96-5			8000	UGG		
								7439-98-7			4200	UGG		
								7440-02-0			5.51	UGG		
								7440-09-7			52.9	UGG		
								7440-23-5			417	UGG		
								7440-28-0			50	UGG		
								7440-38-2			12.5	UGG		
								7440-39-3			12.7	UGG		
								7440-41-7			184	UGG		
								7440-43-9			.523	UGG		
								7440-47-3			2.62	UGG		
											10.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S35S02	S35S02	0.5	01-FEB-92	PC	36650	JS14/S	7440-48-4	Cobalt		40.7	UGG		
								7440-50-8	Copper		102	UGG		
								7440-62-2	Vanadium		35.3	UGG		
								7440-66-6	Zinc		937	UGG		
								7440-70-2	Calcium		15000	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								7429-90-5	Aluminum		4530	UGG		
								7439-89-6	Iron		14000	UGG		
								7439-92-1	Lead		1700	UGG		
								7439-95-4	Magnesium		2120	UGG		
S35S03	S35S03	S35S03	0.5	01-FEB-92	PC	36668	JS14/S	7439-96-5	Manganese		178	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium		266	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		196	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium		7.18	UGG		
S35S01	S35S01	S35S01	0.5	01-FEB-92	PC	36641	JB06/S KY04/S 00 /S 99 / JC02/S LW32/S	7440-47-3	Chromium		12.9	UGG		
								7440-48-4	Cobalt		8.37	UGG		
								7440-50-8	Copper		310	UGG		
								7440-62-2	Vanadium		23	UGG		
								7440-66-6	Zinc		969	UGG		
								7440-70-2	Calcium		4160	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								7439-97-6	Mercury		.195	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								7440-36-0	Total petroleum hydrocarbons	ND	133	UGG		
S35S01	S35S01	S35S01	0.5	01-FEB-92	PC	36641	JB06/S KY04/S 00 /S 99 / JC02/S LW32/S	Antimony		82.9	UGG			
								7440-22-4	Silver		2.65	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2 78-11-5	2,6-Dinitrotoluene	LT	.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quils
SURF	S35S03	S35S03	0.5	01-FEB-92	PC	36668	LW32/S	55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
S37S01	S37S01	S37S01	0.5	04-FEB-92	PC	39012	JS14/	7429-90-5	Aluminum		8900	UGG		K
								7439-89-6	Iron		46000	UGG		K
								7439-92-1	Lead		900	UGG		K
								7439-95-4	Magnesium		8400	UGG		K
								7439-96-5	Manganese		520	UGG		K
								7439-98-7	Molybdenum		16.5	UGG		K
								7440-02-0	Nickel		76.5	UGG		K
								7440-09-7	Potassium		1710	UGG		K
								7440-23-5	Sodium		93.9	UGG		K
								7440-28-0	Thallium	LT	12.5	UGG		K
								7440-36-0	Antimony	LT	82.9	UGG		K
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		179	UGG		K
								7440-41-7	Beryllium		1.05	UGG		K
								7440-43-9	Cadmium		22.1	UGG		K
								7440-47-3	Chromium		114	UGG		K
								7440-48-4	Cobalt		25.7	UGG		K
								7440-50-8	Copper		453	UGG		K
								7440-62-2	Vanadium		38.9	UGG		K
								7440-66-6	Zinc		594	UGG		K
								7440-70-2	Calcium		19000	UGG		K
								7782-49-2	Selenium	LT	12.4	UGG		K
								7439-97-6	Mercury	LT	8.70 E -2	UGG		K
								7440-22-4	Silver	LT	1.01	UGG		K
								57-12-5	Cyanide	LT	1.22	UGG		K
								100-01-6	4-Nitroaniline	ND	1.7	UGG	R	
								100-02-7	4-Nitrophenol	LT	2.5	UGG		K
								100-51-6	Benzyl alcohol	LT	.17	UGG		K
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		K
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		K
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		K
								106-47-8	4-Chloroaniline	ND	.33	UGG	R	
								108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		K
								108-95-2						

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S01	S37S01	0.5	04-FEB-92	PC	39012	LM30/	108-95-2	Phenol / Carbolic acid / Phenic acid / Phenylc acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.37	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-c,d]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		
								50-32-8	Benzo[a]pyrene	LT	.31	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene	LT	.17	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S01	S37S01	0.5	04-FEB-92	PC	39012	LM30/	86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG		
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG		
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 531		.344	UGG	B	
									Unknown compound 533		.459	UGG	S	
									Unknown compound 535		.803	UGG	S	
									Unknown compound 536		.115	UGG	B	
									Unknown compound 540		1.147	UGG	S	
									Unknown compound 544		.115	UGG	S	
									Unknown compound 561		.229	UGG	S	
									Unknown compound 569		.229	UGG	S	
									Unknown compound 570		.115	UGG	S	
									Unknown compound 575		.229	UGG	S	
									Unknown compound 576		.229	UGG	S	
									Unknown compound 577		.344	UGG	S	
									Unknown compound 589		.115	UGG	S	
									Unknown compound 595		.115	UGG	S	
									Unknown compound 654		1.147	UGG	S	
							LM33/	100-41-4	Ethylbenzene	LT				
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	2.5 E -3	UGG		
								107-06-2	1,2-Dichloroethane	LT	3.0 E -3	UGG		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	2.7 E -3	UGG		
								108-88-3	Toluene	LT	1.9 E -2	UGG		
											4.3 E -3	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S01	S37S01	0.5	04-FEB-92	PC 39012		LM33/	108-90-7 124-48-1	Chlorobenzene / Monochlorobenzene Dibromochloromethane / Chlorodibromomethane	LT LT	2.5 E -3 5.7 E -2	UGG UGG		
								127-18-4	Tetrachloroethene / Perchloroethylen*	LT	2.5 E -3	UGG		
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
								67-64-1	Acetone	LT	4.5 E -2	UGG		
								67-66-3	Chloroform	LT	2.6 E -3	UGG		
								71-43-2	Benzene	LT	2.5 E -3	UGG		
								71-55-6	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
								74-83-9	Bromomethane	LT	3.1 E -3	UGG		
								74-87-3	Chloromethane	LT	3.5 E -2	UGG		
								75-00-3	Chloroethane	LT	3.0 E -3	UGG		
								75-01-4	Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
								75-09-2	Methylene chloride / Dichloromethane	LT	9.8 E -3	UGG		
								75-15-0	Carbon disulfide	LT	1.4 E -2	UGG		
								75-25-2	Bromoform	LT	2.5 E -3	UGG		
								75-27-4	Bromodichloromethane	LT	2.5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	2.5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	LT	3.3 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Xylenes, total combined	LT	7.5 E -3	UGG		
									trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
									Aluminum		13000	UGG		
									Iron		14000	UGG		
									Lead		423	UGG		
									Magnesium		13000	UGG		
									Manganese		5800	UGG		
									Molybdenum		4	UGG		
									Nickel	LT	14.8	UGG		
									Potassium		1850	UGG		
S37S02		S37S02	0.5	04-FEB-92	PC 39020		JS14/	7429-90-5 7439-89-6 7439-92-1 7439-95-4 7439-96-5 7439-98-7 7440-02-0 7440-09-7	Aluminum Iron Lead Magnesium Manganese Molybdenum Nickel Potassium					

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S02	S37S02	0.5	04-FEB-92	PC	39020	JS14/	7440-23-5	Sodium		177	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		926	UGG		
								7440-41-7	Beryllium		2.06	UGG		
								7440-43-9	Cadmium		3.52	UGG		
								7440-47-3	Chromium		41.8	UGG		
								7440-48-4	Cobalt		29.2	UGG		
								7440-50-8	Copper		53	UGG		
								7440-62-2	Vanadium		30.5	UGG		
								7440-66-6	Zinc		319	UGG		
								7440-70-2	Calcium		47000	UGG		
		S37S02	0.5	04-FEB-92	PC	39020	JB06/	7782-49-2	Selenium	LT	12.4	UGG		
							JC02/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							KY04/	57-12-5	Silver	LT	1.01	UGG		
		S37S03	0.5	04-FEB-92	PC	39039	JS14/	7429-90-5	Cyanide	LT	1.22	UGG		
								7439-89-6	Aluminum		11000	UGG		
								7439-92-1	Iron		26000	UGG		
								7439-95-4	Lead		81.4	UGG		
								7439-96-5	Magnesium		1550	UGG		
								7439-98-7	Manganese		320	UGG		
								7440-02-0	Molybdenum		4	UGG		
								7440-09-7	Nickel	LT	18.2	UGG		
								7440-23-5	Potassium		526	UGG		
								7440-28-0	Sodium	LT	50	UGG		
								7440-36-0	Thallium	LT	12.5	UGG		
								7440-38-2	Antimony	LT	82.9	UGG		
								7440-39-3	Arsenic	ND	12.7	UGG	T	
								7440-41-7	Barium		35.1	UGG		
								7440-43-9	Beryllium		.867	UGG		
								7440-47-3	Cadmium	LT	.427	UGG		
								7440-48-4	Chromium		18.9	UGG		
								7440-50-8	Cobalt		18.6	UGG		
								7440-62-2	Copper		36	UGG		
								7440-66-6	Vanadium		41.6	UGG		
								7440-70-2	Zinc		159	UGG		
								7782-49-2	Calcium		3160	UGG		
		S37S03	0.5	04-FEB-92	PC	39039	JB06/	7439-97-6	Selenium	LT	12.4	UGG		
							JC02/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							KY04/	57-12-5	Silver	LT	1.01	UGG		
							LM30/	100-01-6	Cyanide	LT	1.22	UGG		
								100-02-7	4-Nitroaniline	ND	1.7	UGG	R	
									4-Nitrophenol	LT	2.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S03	S37S03	0.5	04-FEB-92	PC 39039		LM30/	100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
								106-47-8	4-Chloroaniline	ND	.33	UGG		
								108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.23	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzoidef]phenanthrene / Pyrene	LT	1.4	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.98	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	UGG	1.2	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	UGG	1.8	UGG		
								206-44-0	Fluoranthene	UGG	2.4	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	1	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	UGG	.88	UGG		
								50-32-8	Benzo[a]pyrene	UGG	1.4	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG		
								53-70-3	Dibenz[a,h]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene	UGG	1.1	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S03	S37S03	0.5	04-FEB-92	PC	39039	LM30/	83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene		.83	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG		
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG		
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 531		.126	UGG		
									Unknown compound 535		.881	UGG		
									Unknown compound 536		.126	UGG		
									Unknown compound 540		.252	UGG		
									Unknown compound 595		.252	UGG		
									Unknown compound 606		.126	UGG		
									Unknown compound 608		.252	UGG		
									Unknown compound 611		.252	UGG		
									Unknown compound 612		.126	UGG		
									Unknown compound 624		.503	UGG		
									Unknown compound 631		.377	UGG		
									Unknown compound 651		.377	UGG		
									Unknown compound 656		.377	UGG		
									Ethylbenzene	LT	2.5 E -3	UGG		
									Styrene / Ethylbenzene / Styrol /	LT	2.5 E -3	UGG		
									Styrolene / Cinnameine *					
									cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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File Type: CSO
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[illegible]

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quils
SURF	S37S04	S37S04	0.5	04-FEB-92	PC 39047	JS14/	JS14/	7439-96-5	Manganese		166	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium		344	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		21.1	UGG	T	
								7440-41-7	Beryllium		.378	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		9.85	UGG		
								7440-48-4	Cobalt		7.64	UGG		
								7440-50-8	Copper		15.1	UGG		
								7440-62-2	Vanadium		17.3	UGG		
								7440-66-6	Zinc		302	UGG		
								7440-70-2	Calcium		4070	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								7429-90-5	Aluminum		9300	UGG	D	
								7439-89-6	Iron		26000	UGG		
								7439-92-1	Lead		58.4	UGG		
								7439-95-4	Magnesium		8700	UGG		
								7439-96-5	Manganese		320	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	12.3	UGG		
								7440-09-7	Potassium		585	UGG		
								7440-23-5	Sodium		57	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		41.6	UGG		
								7440-41-7	Beryllium		.636	UGG		
								7440-43-9	Cadmium		.728	UGG		
								7440-47-3	Chromium		29.8	UGG		
								7440-48-4	Cobalt		16.5	UGG		
								7440-50-8	Copper		36	UGG		
								7440-62-2	Vanadium		44	UGG		
								7440-66-6	Zinc		134	UGG		
								7440-70-2	Calcium		20000	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual
SURF	S37S05	S37S05	0.5	04-FEB-92	PC	39055	JB06/ JC02/ KY04/ LM30/	7439-97-6	Mercury	LT	8.70	E -2		
								7440-22-4	Silver	LT	1.01			
								57-12-5	Cyanide	LT	1.22			
								100-01-6	4-Nitroaniline	ND	1.7			R
								100-02-7	4-Nitrophenol	LT	2.5			
								100-51-6	Benzyl alcohol	LT	.17			
								105-67-9	2,4-Dimethylphenol	LT	.33			
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18			
								106-46-7	1,4-Dichlorobenzene	LT	.17			
								106-47-8	4-Chloroaniline	ND	.33			
								108-60-1	Bis(2-chloroisopropyl) ether	LT	.17			R
								108-95-2	Phenol / Carbohic acid / Phenic acid / Phenyllic acid / Phe*	LT	.17			
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6			
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17			
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19			
								117-84-0	Di-n-octyl phthalate	LT	.22			
								118-74-1	Hexachlorobenzene	LT	.26			
								120-12-7	Anthracene	LT	.17			
								120-82-1	1,2,4-Trichlorobenzene	LT	.29			
								120-83-2	2,4-Dichlorophenol	LT	.28			
								121-14-2	2,4-Dinitrotoluene	LT	.31			
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97			
								131-11-3	Dimethyl phthalate	LT	.17			
								132-64-9	Dibenzofuran	LT	.17			
								191-24-2	Benzo[ghi]perylene	LT	.25			
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17			
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzo[fluoranthene	LT	.73			
								206-44-0	Fluoranthene	LT	.17			
								207-08-9	Benzo[k]fluoranthene	LT	.4			
								208-96-8	Acenaphthylene	LT	.27			
								218-01-9	Chrysene	LT	.27			
								50-32-8	Benzo[a]pyrene	LT	.24			
								51-28-5	2,4-Dinitrophenol	ND	1.7			
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27			
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84			
								541-73-1	1,3-Dichlorobenzene	LT	.58			
								56-55-3	Benzo[a]anthracene	LT	.17			
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23			
								606-20-2	2,6-Dinitrotoluene	LT	.2			

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S05	S37S05	0.5	04-FEB-92	PC	39055	LM30/	621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	LT	.66	UGG		
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	.17	UGG	R	
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 531		.111	UGG	B	
									Unknown compound 535		.997	UGG	S	
									Unknown compound 536		.664	UGG	B	
									Unknown compound 623		.111	UGG	S	
									Unknown compound 631		.332	UGG	B	
									Ethylbenzene					
								100-41-4	Styrene / Ethylbenzene / Styrol /	LT	2.5 E -3	UGG		
								100-42-5	Styrolene / Cinamene *	LT	2.5 E -3	UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		
									1,2-Dichloroethane					
								107-06-2	Methyl isobutyl ketone /	LT	2.7 E -3	UGG		
								108-10-1	Isopropylacetone / 4-Methyl-2-pen*	LT	1.9 E -2	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S05	S37S05	0.5	04-FEB-92	PC 39055		LM33/	108-88-3	Toluene	LT	2.5 E -3	UGG		
								108-90-7	Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
								127-18-4	Tetrachloroethylene / Tetrachloroethene / Perchloroethylen*	LT	2.5 E -3	UGG		
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
								67-64-1	Acetone	LT	4.5 E -2	UGG		
								67-66-3	Chloroform	LT	2.6 E -3	UGG		
								71-43-2	Benzene	LT	2.5 E -3	UGG		
								71-55-6	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
								74-83-9	Bromomethane	LT	2.5 E -3	UGG		
								74-87-3	Chloromethane	LT	3.1 E -3	UGG		
								75-00-3	Chloroethane	LT	3.5 E -2	UGG		
								75-01-4	Vinyl chloride / Chloroethene	LT	3.0 E -3	UGG		
								75-09-2	Methylene chloride / Dichloromethane	LT	3.8 E -3	UGG		
								75-15-0	Carbon disulfide	LT	6.2 E -3	UGG		
								75-25-2	Bromoform	LT	1.4 E -2	UGG		
								75-27-4	Bromodichloromethane	LT	2.5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	2.5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	2.5 E -3	UGG		
								75-69-4	Dichloroethene	LT	3.2 E -2	UGG		
								78-87-5	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
								78-93-3	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								79-00-5	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-01-6	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-34-5	Trichloroethylene /Trichloroethene / Ethinyl trichloride /T*	LT	2.5 E -3	UGG		
									Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Xylenes, total combined	LT	7.5 E -3	UGG		
									trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
								7429-90-5	Aluminum		6400	UGG		
								7439-89-6	Iron		11000	UGG		
								7439-92-1	Lead		127	UGG		
								7439-95-4	Magnesium		8600	UGG		
								7439-96-5	Manganese		270	UGG		
								7439-98-7	Molybdenum		6.96	UGG		
								7440-02-0	Nickel		14.6	UGG		
S37S06		S37S06	0.5	04-FEB-92	PC 39063		JS14/	7429-90-5	Aluminum		6400	UGG		
								7439-89-6	Iron		11000	UGG		
								7439-92-1	Lead		127	UGG		
								7439-95-4	Magnesium		8600	UGG		
								7439-96-5	Manganese		270	UGG		
								7439-98-7	Molybdenum		6.96	UGG		
								7440-02-0	Nickel		14.6	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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 File Type: CSO
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S37S06	S37S06	0.5	04-FEB-92	PC	39063	JS14/	7440-09-7	Potassium		897	UGG		
								7440-23-5	Sodium		67.5	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		84.8	UGG		
								7440-41-7	Beryllium		.519	UGG		
								7440-43-9	Cadmium		6.06	UGG		
								7440-47-3	Chromium		30	UGG		
								7440-48-4	Cobalt		9.7	UGG		
								7440-50-8	Copper		63.4	UGG		
								7440-62-2	Vanadium		13.7	UGG		
								7440-66-6	Zinc		191	UGG		
								7440-70-2	Calcium		26000	UGG		
		S37S06	0.5	04-FEB-92	PC	39063	JB06/	7782-49-2	Selenium	LT	12.4	UGG		
							JC02/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							KY04/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	57-12-5	Cyanide	LT	1.22	UGG		
								7429-90-5	Aluminum		25000	UGG		
								7439-89-6	Iron		47000	UGG		
								7439-92-1	Lead		22.5	UGG		
								7439-95-4	Magnesium		565	UGG		
								7439-96-5	Manganese		810	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	16.9	UGG		
								7440-09-7	Potassium		870	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		66.1	UGG		
								7440-41-7	Beryllium		.839	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		51.6	UGG		
								7440-48-4	Cobalt		29.8	UGG		
								7440-50-8	Copper		33.9	UGG		
								7440-62-2	Vanadium		83.4	UGG		
								7440-66-6	Zinc		221	UGG		
								7440-70-2	Calcium		1760	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4						

* - Analyte Description has been truncated. See Data Dictionary

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 Installation : Anniston AD, AL (AN)
 File Type: CSO
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S5S01	S5S01	0.0	30-JAN-92	PC	31585	LW32/S	121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
	S5S01		0.0	30-JAN-92	PC	31585	JB06/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
	S5S02		0.0	30-JAN-92	PC	31593	JS14/	7429-90-5	Aluminum	LT	41000	UGG		
								7439-89-6	Iron		51000	UGG		
								7439-92-1	Lead		35.6	UGG		
								7439-95-4	Magnesium		994	UGG		
								7439-96-5	Manganese		1400	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		25.5	UGG		
								7440-09-7	Potassium		1340	UGG		
								7440-23-5	Sodium		77.4	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		102	UGG		
								7440-41-7	Beryllium		1.01	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		46.5	UGG		
								7440-48-4	Cobalt		42.5	UGG		
								7440-50-8	Copper		35.1	UGG		
								7440-62-2	Vanadium		83.3	UGG		
								7440-66-6	Zinc		220	UGG		
								7440-70-2	Calcium		2210	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	2,4-Dinitrotoluene	LT		UGG		

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S5S02	S5S02	0.0	30-JAN-92	PC 31593		LW32/S	121-82-4	ROX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
		S5S02	0.0	30-JAN-92	PC 31593		JB06/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
							JS14/	7429-90-5	Aluminum	LT	56000	UGG		
								7439-89-6	Iron		39000	UGG		
								7439-92-1	Lead		338	UGG		
								7439-95-4	Magnesium		1480	UGG		
								7439-96-5	Manganese		2700	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	30.6	UGG		
								7440-09-7	Potassium		1750	UGG		
								7440-23-5	Sodium		102	UGG		
								7440-28-0	Thallium		12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG		
								7440-39-3	Barium	ND	123	UGG		
								7440-41-7	Beryllium		1.04	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		101	UGG		
								7440-48-4	Cobalt		42	UGG		
								7440-50-8	Copper		37.6	UGG		
								7440-62-2	Vanadium		80.5	UGG		
								7440-66-6	Zinc		155	UGG		
								7440-70-2	Calcium		6000	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
							LW32/S		2,4-Dinitrotoluene	LT	.251	UGG		
								121-14-2						
								121-82-4						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S5S03	S5S03	0.0	30-JAN-92	PC	31607	LU32/S	121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N, 2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
	S5S03		0.0	30-JAN-92	PC	31607	J806/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
							JS14/	7429-90-5	Aluminum	LT	37000	UGG		
								7439-89-6	Iron		31000	UGG		
								7439-92-1	Lead		32.7	UGG		
								7439-95-4	Magnesium		1060	UGG		
								7439-96-5	Manganese		2700	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	21.8	UGG		
								7440-09-7	Potassium		1300	UGG		
								7440-23-5	Sodium		70	UGG		
								7440-28-0	Thallium		12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG		
								7440-39-3	Barium	ND	161	UGG		
								7440-41-7	Beryllium		1.02	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		29.2	UGG		
								7440-48-4	Cobalt		32.1	UGG		
								7440-50-8	Copper		21.6	UGG		
								7440-62-2	Vanadium		57.3	UGG		
								7440-66-6	Zinc		95.6	UGG		
								7440-70-2	Calcium		1770	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LM30/	100-01-6	4-Nitroaniline	ND	1.7	UGG		
								100-02-7	4-Nitrophenol	LT	2.5	UGG		
								100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S5S04	S5S04	0.0	30-JAN-92	PC	31615	LW30/	106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
								106-47-8	4-Chloroaniline	ND	.33	UGG		
								108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		
								50-32-8	Benzo[a]pyrene	LT	.24	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG		
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene	LT	.17	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)

File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S5S04	S5S04	0.0	30-JAN-92	31615	PC		LM30/	84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
									85-01-8	Phenanthrene	LT	.17	UGG		
									85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
									86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
									86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
									87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
									87-86-5	Pentachlorophenol	LT	.48	UGG		
									88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
									88-74-4	2-Nitroaniline	LT	.36	UGG		
									88-75-5	2-Nitrophenol	LT	.26	UGG		
									91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
									91-57-6	2-Methylnaphthalene	LT	.17	UGG		
									91-58-7	2-Chloronaphthalene	LT	.33	UGG		
									91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG	R	
									95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
									95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
									95-57-8	2-Chlorophenol	LT	.17	UGG		
									95-57-8	2,4,5-Trichlorophenol	LT	.24	UGG		
									95-95-4	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
									98-95-3						
									99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
										4-Bromophenyl phenyl ether	LT	.17	UGG		
										4-Chlorophenyl phenyl ether	LT	.2	UGG		
										Unknown compound 531		1.271	UGG	B	
										Unknown compound 535		.381	UGG	S	
										Unknown compound 631		12.706	UGG	B	
										Unknown compound 650		.127	UGG	S	
										2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
										2,4-Dinitrotoluene	LT	.251	UGG		
										RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
										Cyclotetramethylenetetranitramine	LT	.499	UGG		
										Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
										Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
										2,6-Dinitrotoluene	LT	.5	UGG		
										PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
										2-Nitrotoluene	LT	.505	UGG		
										3-Nitrotoluene	LT	.251	UGG		
										1,3,5-Trinitrobenzene	LT	.25	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S5S04	S5S04	0.0	30-JAN-92	PC	31615	LM32/S	99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
		S5S04	0.0	30-JAN-92	PC	31615	JB06/S	99-99-0	4-Nitrotoluene	LT	.245	UGG		
							JC02/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							KY04/S	7440-22-4	Silver	LT	1.01	UGG		
							LH19/	57-12-5	Cyanide	LT	1.22	UGG		
								1024-57-3	Heptachlor epoxide	LT	3.90 E -3	UGG		
								1031-07-8	Endosulfan sulfate	LT	1.30 E -2	UGG		
								1104-28-2	PCB 1221	ND	8.00 E -2	UGG		
								11096-82-5	PCB 1260	ND	4.00 E -2	UGG		
								11097-69-1	PCB 1254	ND	4.00 E -2	UGG		
								11141-16-5	PCB 1232	ND	4.00 E -2	UGG		
								12672-29-6	PCB 1248	ND	4.00 E -2	UGG		
								12674-11-2	PCB 1016	ND	4.00 E -2	UGG		
								309-00-2	Aldrin	LT	1.30 E -2	UGG		
								319-84-6	alpha-Hexachlorocyclohexane / alpha-Benzene hexachloride	LT	2.50 E -3	UGG		
								319-85-7	beta-Hexachlorocyclohexane / beta-Benzene hexachloride	LT	5.40 E -3	UGG		
								319-86-8	delta-Hexachlorocyclohexane / delta-Benzene hexachloride	LT	2.28 E -2	UGG		
								33213-65-9	Endosulfan II / beta-Endosulfan	LT	7.10 E -3	UGG		
								50-29-3	2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane	LT	9.60 E -3	UGG		
								5103-71-9	alpha-Chlordane	LT	4.00 E -3	UGG		
								53469-21-9	PCB 1242	ND	4.00 E -2	UGG		
								53494-70-5	Endrin ketone	LT	6.10 E -3	UGG		
								5566-34-7	gamma-Chlordane	LT	2.14 E -2	UGG		
								58-89-9	Lindane / gamma-Benzene hexachloride / gamma-Hexachlorocyclopentadiene	LT	2.00 E -2	UGG		
								60-57-1	Dieldrin	LT	7.80 E -3	UGG		
								72-20-8	Endrin	LT	1.11 E -2	UGG		
								72-43-5	Methoxychlor / Methoxy-DDT / 1,1'- (2,2,2-Trichloroethylidene)*	LT	.211	UGG		
								72-54-8	ppDDD / 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane / Rhoth*	LT	1.12 E -2	UGG		
								72-55-9	2,2-Bis(p-chlorophenyl)-1,1-dichloroethene	LT	1.42 E -2	UGG		
								7421-93-4	Endrin aldehyde	LT	2.76 E -2	UGG		
								76-44-8	Heptachlor / 1H-1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-2H-pyran-2-one	LT	9.60 E -3	UGG		
								8001-35-2	Toxaphene / Chlorinated camphene / Camphchlor / Alitox / *	ND	.2	UGG		
								959-98-8	Endosulfan I / alpha-Endosulfan	LT	4.70 E -3	UGG		
								100-41-4	Ethylbenzene	LT	2.5 E -3	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SURF	S5S04	S5S04	0.0	30-JAN-92	PC	31615	LM33/	100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		
								107-06-2	1,2-Dichloroethane	LT	2.7 E -3	UGG		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	1.9 E -2	UGG		
								108-88-3	Toluene	LT	2.5 E -3	UGG		
								108-90-7	Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
								127-18-4	Tetrachloroethylene / Tetrachloroethene / Perchloroethylen*	LT	2.5 E -3	UGG		
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
								67-64-1	Acetone	LT	4.5 E -2	UGG		
								67-66-3	Chloroform	LT	2.6 E -3	UGG		
								71-43-2	Benzene	LT	2.5 E -3	UGG		
								71-55-6	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
								74-83-9	Bromomethane	LT	3.1 E -3	UGG		
								74-87-3	Chloromethane	LT	3.5 E -2	UGG		
								75-00-3	Chloroethane	LT	3.0 E -3	UGG		
								75-01-4	Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
								75-09-2	Methylene chloride / Dichloromethane	LT	6.2 E -3	UGG		
								75-15-0	Carbon disulfide	LT	1.4 E -2	UGG		
								75-25-2	Bromoform	LT	2.5 E -3	UGG		
								75-27-4	Bromodichloromethane	LT	2.5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	2.5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride /T*	LT	2.5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Xylenes, total combined	LT	7.5 E -3	UGG		
									trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

** End of Report - 1630 Records Found **

* - Analyte Description has been truncated. See Data Dictionary

Appendix G
Subsurface Soil Data

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B11C	S10B11-C	0.0	22-JAN-92	PC	23400	00 /S		Total organic carbon		772	UGG		
							99 /S	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							LM32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								7439-97-6	Mercury	LT	8.70 E -2	UGG		K
S10B11C			0.0	22-JAN-92	PC	23400	JB06/S	7429-90-5	Aluminum		7500	UGG		
							JS14/S	7439-89-6	Iron	LT	21000	UGG		
								7439-92-1	Lead		10	UGG		
								7439-95-4	Magnesium		274	UGG		
								7439-96-5	Manganese		41.1	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium		218	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-39-3	Barium		12.6	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		27.6	UGG		
								7440-48-4	Cobalt		7.68	UGG		
								7440-50-8	Copper		5.75	UGG		
								7440-62-2	Vanadium		34.6	UGG		
								7440-66-6	Zinc		15.9	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B11C	S10B12-C	10.0	22-JAN-92	PC	23418	99 /S JC02/S LW32/S	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
								7440-22-4	Silver	LT	1.01	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	1.27	UGG		
								55-63-0		LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis(nitrooxy)me*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7429-90-5	Aluminum		7600	UGG		
								7439-89-6	Iron	LT	15000	UGG		
								7439-92-1	Lead		10	UGG		
								S10B13-C	91B11C	S10B12-C	10.0	22-JAN-92		
7439-96-5	Manganese		32.8	UGG										
7439-98-7	Molybdenum	LT	4	UGG										
7440-02-0	Nickel	LT	7.5	UGG										
7440-09-7	Potassium	LT	142	UGG										
7440-23-5	Sodium		152	UGG										
7440-28-0	Thallium	LT	12.5	UGG										
7440-36-0	Antimony	LT	82.9	UGG										
7440-39-3	Barium		8.91	UGG										
7440-41-7	Beryllium	LT	.25	UGG										
7440-43-9	Cadmium	LT	.427	UGG										
7440-47-3	Chromium		70.9	UGG										
7440-48-4	Cobalt		6.55	UGG										
7440-50-8	Copper		9.49	UGG										
7440-62-2	Vanadium		27.5	UGG										
7440-66-6	Zinc		14.5	UGG										
7440-70-2	Calcium		109	UGG										
7782-49-2	Selenium	LT	12.4	UGG										
57-12-5	Cyanide	LT	1.22	UGG										
14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T									

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B11C	S10B13-C	15.0	22-JAN-92	PC	23426	JC02/S LW32/S	7440-22-4	Silver	LT	1.01	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7429-90-5	Aluminum		8800	UGG		
								7439-89-6	Iron		20000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		31.6	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-39-3	Barium		9.23	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		28	UGG		
								7440-48-4	Cobalt		7.46	UGG		
								7440-50-8	Copper		9.45	UGG		
								7440-62-2	Vanadium		40.3	UGG		
								7440-66-6	Zinc		12.5	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								99 /S	Nitrite, nitrate - nonspecific	ND	1	UGG		
								14797-55-8	Silver	LT	1.01	UGG		
								7440-22-4						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)

File Type: CS0
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual's
BORE	91B11C	S10B14-C	20.0	22-JAN-92	PC	23434	LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
									2,4-Dinitrotoluene	LT				
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.251	UGG		K
											.51	UGG		K
									Cyclotetramethylenetetranitramine	LT	.499	UGG		K
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	1.27	UGG		K
											2.5	UGG		K
									2,6-Dinitrotoluene	LT				
									PETN / Pentaerythritol tetranitrate / 2,2-Bis(nitrooxy)me*	LT	.5	UGG		K
											2.5	UGG		K
									2-Nitrotoluene	LT	.505	UGG		K
									3-Nitrotoluene	LT	.251	UGG		K
									1,3,5-Trinitrobenzene	LT	.25	UGG		K
									1,3-Dinitrobenzene	LT	.249	UGG		K
									4-Nitrotoluene	LT	.245	UGG		K
									Mercury	LT	8.70 E -2	UGG		K
									Aluminum	LT	9100	UGG		
									Iron		18000	UGG		
									Lead	LT	10	UGG		
									Magnesium	LT	138	UGG		
									Manganese		29	UGG		
									Molybdenum	LT	4	UGG		
									Nickel	LT	7.5	UGG		
Potassium	LT	142	UGG											
Sodium	LT	50	UGG											
Thallium	LT	12.5	UGG											
Antimony	LT	82.9	UGG											
Barium		9.96	UGG											
Beryllium	LT	.25	UGG											
Cadmium	LT	.427	UGG											
Chromium		15.5	UGG											
Cobalt		7.72	UGG											
Copper		11.9	UGG											
Vanadium		33.1	UGG											
Zinc		18.5	UGG											
Calcium	LT	109	UGG											
Selenium	LT	12.4	UGG											
Cyanide	LT	1.22	UGG											
Nitrite, nitrate - nonspecific Silver	ND	1	UGG			T								
	LT	1.01	UGG											

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B11C	S10B16-C	30.0	22-JAN-92	PC 23442		LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								7439-97-6	Mercury	LT	8.70 E -2	UGG		K
								7429-90-5	Aluminum	LT	11000	UGG		K
								7439-89-6	Iron	LT	19000	UGG		K
								7439-92-1	Lead	LT	10	UGG		K
								7439-95-4	Magnesium	LT	273	UGG		K
								7439-96-5	Manganese	LT	57	UGG		K
								7439-98-7	Molybdenum	LT	4	UGG		K
								7440-02-0	Nickel	LT	7.5	UGG		K
								7440-09-7	Potassium	LT	278	UGG		K
								7440-23-5	Sodium	LT	50	UGG		K
								7440-28-0	Thallium	LT	12.5	UGG		K
								7440-36-0	Antimony	LT	82.9	UGG		K
								7440-39-3	Barium	LT	15.4	UGG		K
								7440-41-7	Beryllium	LT	.25	UGG		K
								7440-43-9	Cadmium	LT	.427	UGG		K
								7440-47-3	Chromium	LT	15.2	UGG		K
								7440-48-4	Cobalt	LT	9.56	UGG		K
								7440-50-8	Copper	LT	15.1	UGG		K
								7440-62-2	Vanadium	LT	35.3	UGG		K
								7440-66-6	Zinc	LT	30.6	UGG		K
								7440-70-2	Calcium	LT	109	UGG		K
								7782-49-2	Selenium	LT	12.4	UGG		K
								57-12-5	Cyanide	LT	1.22	UGG		K
									Total organic carbon	LT	6970	UGG		K
									Nitrite, nitrate - nonspecific	ND	1	UGG	T	
									Antimony	ND	82.9	UGG	T	
91B11D		S091B11D	0.0	01-FEB-92	PC 38911		KY04/S 00 /S	14797-55-8						
								99 /S						
								99 /						

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual's
BORE	91B11D	S091B11D	0.0	01-FEB-92	PC	38911	JB06/S JC02/S JS14/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		9500	UGG		
								7439-89-6	Iron		13000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		345	UGG		
								7439-96-5	Manganese		29.3	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		12.2	UGG		
								7440-09-7	Potassium		824	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		T
								7440-39-3	Barium		7.74	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		18.8	UGG		
								7440-48-4	Cobalt		9.91	UGG		
								7440-50-8	Copper		14.5	UGG		
								7440-62-2	Vanadium		24.9	UGG		
							KY04/S LW32/S	7440-66-6	Zinc		30.3	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								7439-97-6	Mercury	LT	8.70 E -2	UGG		K
								7440-22-4	Silver	LT	1.01	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B11D	S091B11D	0.0	01-FEB-92	PC	38920	KY04/S LW32/S	57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
			5.0	01-FEB-92	PC	38920	99 /S	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
							99 /	7440-36-0	Antimony	ND	82.9	UGG	T	
							JS14/S	7429-90-5	Aluminum		8800	UGG		
								7439-89-6	Iron		13000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		323	UGG		
								7439-96-5	Manganese		40.1	UGG		
								7439-98-7	Molybdenum		4.73	UGG	1	
								7440-02-0	Nickel		16.2	UGG		
								7440-09-7	Potassium		819	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		7.8	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		37.5	UGG		
								7440-48-4	Cobalt		9.11	UGG		
								7440-50-8	Copper		15.1	UGG		
								7440-62-2	Vanadium		20.1	UGG		
								7440-66-6	Zinc		23.3	UGG		
								7440-70-2	Calcium	LT	109	UGG		
			10.0	02-FEB-92	PC	38938	99 /S	7782-49-2	Selenium	LT	12.4	UGG		
							99 /	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
								7440-36-0	Antimony	ND	82.9	UGG	T	

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B11D	S091B11D	10.0	02-FEB-92	PC	38938	J806/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							JS14/S	7429-90-5	Aluminum		4410	UGG		
								7439-89-6	Iron		9900	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		169	UGG		
								7439-96-5	Manganese		28.1	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		15.4	UGG		
								7440-09-7	Potassium		382	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium	LT	4.87	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		34.7	UGG		
								7440-48-4	Cobalt		8.36	UGG		
								7440-50-8	Copper		12.6	UGG		
								7440-62-2	Vanadium		14.7	UGG		
								7440-66-6	Zinc		25.8	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LU32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG		
							99 /	7440-36-0	Antimony	ND	82.9	UGG		
							J806/	7439-97-6	Mercury	LT	8.70 E -2	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B11D	S091B11D	22.5	03-FEB-92	38946	PC	JC02/S JS14/S	7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		14000	UGG		
								7439-89-6	Iron		21000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		422	UGG		
								7439-96-5	Manganese		35.7	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	12.7	UGG		
								7440-09-7	Potassium		660	UGG		
								7440-23-5	Sodium		75.2	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		11.4	UGG		
								7440-41-7	Beryllium		.406	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		29.3	UGG		
								7440-48-4	Cobalt		14.2	UGG		
								7440-50-8	Copper		16.8	UGG		
								7440-62-2	Vanadium		33.7	UGG		
								7440-66-6	Zinc		34.6	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG		
								7440-36-0	Antimony	ND	82.9	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91811D	S091B11D	25.0	03-FEB-92	PC	38954	JC02/S JS14/S	7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		14000	UGG		
								7439-89-6	Iron		19000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		394	UGG		
								7439-96-5	Manganese		32.6	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		9.85	UGG		
								7440-09-7	Potassium		468	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		11.7	UGG		
								7440-41-7	Beryllium	LT	.412	UGG		
								7440-43-9	Cadmium		.427	UGG		
								7440-47-3	Chromium		15.2	UGG		
								7440-48-4	Cobalt		13.5	UGG		
								7440-50-8	Copper		18.1	UGG		
								7440-62-2	Vanadium		35	UGG		
								7440-66-6	Zinc		34.3	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
								14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG		T
								7440-36-0	Antimony	ND	82.9	UGG		T
								7439-97-6	Mercury	LT	8.70 E -2	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qualls
BORE	91B11D	S091B11D	35.0	04-FEB-92	PC 38962		JC02/S JS14/S	7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		9600	UGG		
								7439-89-6	Iron		13000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		247	UGG		
								7439-96-5	Manganese		32.2	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium		343	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		8.92	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		11.7	UGG		
								7440-48-4	Cobalt		10.5	UGG		
								7440-50-8	Copper		15.1	UGG		
								7440-62-2	Vanadium		24.3	UGG		
								7440-66-6	Zinc		32.5	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/ LW32/S	57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K
91B12		S091B12	5.0	10-JAN-92	PC 01162.2		99 /S	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG		T
								57-12-5	Cyanide	LT	1.22	UGG		
								1162.2	Arsenic	ND	12.7	UGG		T

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B12	S091B12	10.0	10-JAN-92	PC	11630	JS14/	7440-66-6	Zinc		8.72	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
			15.0	10-JAN-92	PC	01164.9	99 /S	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
								57-12-5	Cyanide	LT	1.22	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
						1164.9	99 /S	7439-97-6	Mercury	LT	8.70 E -2	UGG	T	
						11649	JB06/	7429-90-5	Aluminum		4190	UGG		
							JS14/	7439-89-6	Iron		17000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		124	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium		64.7	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-39-3	Antimony	LT	82.9	UGG		
								7440-41-7	Barium		6.47	UGG		
								7440-43-9	Beryllium	LT	.25	UGG		
								7440-47-3	Cadmium	LT	.427	UGG		
								7440-48-4	Chromium		21.2	UGG		
								7440-50-8	Cobalt		9.68	UGG		
								7440-62-2	Copper		7.93	UGG		
								7440-66-6	Vanadium		27	UGG		
								7440-70-2	Zinc		12.9	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
			20.0	10-JAN-92	PC	01165.7	99 /S	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
								57-12-5	Cyanide	LT	1.22	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
						1165.7	99 /S	7439-97-6	Mercury	LT	8.70 E -2	UGG	T	
						11657	JB06/	7429-90-5	Aluminum		4910	UGG		
							JS14/	7439-89-6	Iron		19000	UGG		
								7439-92-1	Lead		12.5	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		144	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium		66.1	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-39-3	Barium		9.38	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B12	S091B12	20.0	10-JAN-92	PC	11657	JS14/	7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		28.4	UGG		
								7440-48-4	Cobalt		10.8	UGG		
								7440-50-8	Copper		9.69	UGG		
								7440-62-2	Vanadium		30.1	UGG		
								7440-66-6	Zinc		15.3	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
			25.0	10-JAN-92	PC	01166.5	99 /S	14797-55-8	Nitrite, nitrate - nonspecific					
								57-12-5	Cyanide	LT	1.22	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7429-90-5	Aluminum		4190	UGG		
								7439-89-6	Iron		13000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		43	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-39-3	Barium	LT	4.87	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		12.5	UGG		
								7440-48-4	Cobalt		7.33	UGG		
								7440-50-8	Copper		6.47	UGG		
								7440-62-2	Vanadium		25.8	UGG		
								7440-66-6	Zinc		7.79	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
			32.0	11-JAN-92	PC	01167.3	99 /S	14797-55-8	Nitrite, nitrate - nonspecific					
								57-12-5	Cyanide	LT	1.41	UGG		
								7440-38-2	Arsenic	LT	1.22	UGG		
								7439-97-6	Mercury	ND	12.7	UGG		
								7429-90-5	Aluminum	LT	8.70 E -2	UGG		
								7439-89-6	Iron		2230	UGG		
								7439-92-1	Lead		5800	UGG		
								7439-95-4	Magnesium	LT	10	UGG		
								7439-96-5	Manganese	LT	138	UGG		
								7439-98-7	Molybdenum	LT	26.4	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91812	S091B12	32.0	11-JAN-92	PC 11673		JS14/	7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-39-3	Barium	LT	4.87	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		10.6	UGG		
								7440-48-4	Cobalt		3.8	UGG		
								7440-50-8	Copper		5.74	UGG		
								7440-62-2	Vanadium		14.4	UGG		
								7440-66-6	Zinc		8.77	UGG		
								7440-70-2	Calcium		163	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0						

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B12	S091B12C	10.0	10-JAN-92	11630		PC	LW32/	55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
									78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
									88-72-2	2-Nitrotoluene	LT	.505	UGG		
									99-08-1	3-Nitrotoluene	LT	.251	UGG		
									99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
									99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
									99-99-0	4-Nitrotoluene	LT	.245	UGG		
									7440-22-4	Silver	LT	1.01	UGG		
			15.0	10-JAN-92	1164.9		PC	JC02/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
					11649				121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
									121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
									479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
									78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
									88-72-2	2-Nitrotoluene	LT	.505	UGG		
									99-08-1	3-Nitrotoluene	LT	.251	UGG		
									99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
									99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
									99-99-0	4-Nitrotoluene	LT	.245	UGG		
			20.0	10-JAN-92	1165.7		PC	JC02/S	7440-22-4	Silver	LT	1.01	UGG		
					11657				118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
									121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
									121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
									479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
									78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
									88-72-2	2-Nitrotoluene	LT	.505	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quails
BORE	91B12	S091B12C	20.0	10-JAN-92	PC 11657		LW32/	99-08-1 99-35-4 99-65-0 99-99-0	3-Nitrotoluene 1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 4-Nitrotoluene	LT LT LT LT	.251 .25 .249 .245	UGG UGG UGG UGG		
			25.0	10-JAN-92	PC 11665		JC02/S LW32/	7440-22-4 118-96-7	Silver 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT LT	1.01 .25	UGG UGG		
								121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.251 .51	UGG UGG		
								2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	.499 1.27	UGG UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate /	LT LT	.5 2.5	UGG UGG		
								88-72-2 99-08-1 99-35-4 99-65-0 99-99-0	2,2-Bis[(nitrooxy)me*] 2-Nitrotoluene 3-Nitrotoluene 1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 4-Nitrotoluene	LT LT LT LT LT	.505 .251 .25 .249 .245	UGG UGG UGG UGG UGG		
			32.0	11-JAN-92	PC 11673		JC02/S LW32/	7440-22-4 118-96-7	Silver 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT LT	1.01 .25	UGG UGG		
								121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.251 .51	UGG UGG		
								2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	.499 1.27	UGG UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate /	LT LT	.5 2.5	UGG UGG		
								88-72-2 99-08-1 99-35-4 99-65-0 99-99-0	2,2-Bis[(nitrooxy)me*] 2-Nitrotoluene 3-Nitrotoluene 1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 4-Nitrotoluene	LT LT LT LT LT	.505 .251 .25 .249 .245	UGG UGG UGG UGG UGG		
91B14		S91B141C	5.0	20-FEB-92	PC 56286		00 / 99 /	14797-55-8	Total petroleum hydrocarbons Nitrite, nitrate - nonspecific	ND	20.9 1	UGG UGG		T

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B14	S91B142C	10.0	20-FEB-92	PC 56294		99 /	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
		S91B143C	15.0	20-FEB-92	PC 56308		99 /	14797-55-8	Nitrite, nitrate - nonspecific	ND	10	UGG	T	
		S91B146C	5.0	20-FEB-92	PC 56316		00 /		Total petroleum hydrocarbons	ND	10	UGG	T	
91B15		S91B151C	5.0	18-FEB-92	PC 53350		99 /	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
		S91B152C	9.0	18-FEB-92	PC 53368		00 /	14797-55-8	Nitrite, nitrate - nonspecific	ND	7	UGG	T	
									Total petroleum hydrocarbons	ND	12.2	UGG	T	
91B16		91B161C	0.5	16-FEB-92	PC 51438		JB06/ JC02/ JS14/	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
								7439-97-6	Mercury	LT	.144	UGG		
								7440-22-4	Silver		1.01	UGG		
								7429-90-5	Aluminum		14000	UGG		
								7439-89-6	Iron		53000	UGG		
								7439-92-1	Lead		136	UGG		
								7439-95-4	Magnesium		555	UGG		
								7439-96-5	Manganese		1600	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	21.5	UGG		
								7440-09-7	Potassium		428	UGG		
								7440-23-5	Sodium		278	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		148	UGG		
								7440-41-7	Beryllium		.973	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		30.1	UGG		
								7440-48-4	Cobalt		43.3	UGG		
								7440-50-8	Copper		45.1	UGG		
								7440-62-2	Vanadium		45.1	UGG		
								7440-66-6	Zinc		180	UGG		
								7440-70-2	Calcium		935	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B16	91B161C	0.5	16-FEB-92	PC	51438	LW32/	88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum	UGG	13000	UGG		
								7439-89-6	Iron	UGG	35000	UGG		
								7439-92-1	Lead	UGG	40.2	UGG		
								7439-95-4	Magnesium	UGG	644	UGG		
								7439-96-5	Manganese	UGG	3600	UGG		
								7439-98-7	Molybdenum	UGG	5.49	UGG		
								7440-02-0	Nickel	UGG	61	UGG		
	91B162C	91B162C	10.0	16-FEB-92	PC	51446	JB06/ JC02/ JS14/	7440-09-7	Potassium		537	UGG		
								7440-23-5	Sodium		182	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		191	UGG		
								7440-41-7	Beryllium		2.29	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		24.4	UGG		
								7440-48-4	Cobalt		66.8	UGG		
								7440-50-8	Copper		51.4	UGG		
								7440-62-2	Vanadium		58.7	UGG		
								7440-66-6	Zinc		124	UGG		
								7440-70-2	Calcium		720	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B16	91B162C	10.0	16-FEB-92	51446		PC	LW32/	99-08-1	3-Nitrotoluene	LT	.251	UGG		
									99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
									99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
									99-99-0	4-Nitrotoluene	LT	.245	UGG		
		91B163C	15.0	16-FEB-92	51454		PC	JC02/ JS14/	7440-22-4	Silver	LT	1.01	UGG		
									7429-90-5	Aluminum		11000	UGG		
									7439-89-6	Iron		29000	UGG		
									7439-92-1	Lead		30.9	UGG		
									7439-95-4	Magnesium		606	UGG		
									7439-96-5	Manganese		1500	UGG		
									7439-98-7	Molybdenum		5.87	UGG		
									7440-02-0	Nickel		40.7	UGG		
									7440-09-7	Potassium		664	UGG		
									7440-23-5	Sodium	LT	50	UGG		
									7440-28-0	Thallium	LT	12.5	UGG		
									7440-36-0	Antimony	LT	82.9	UGG		
									7440-38-2	Arsenic	ND	12.7	UGG		
									7440-39-3	Barium		88.2	UGG		
									7440-41-7	Beryllium		1.81	UGG		
									7440-43-9	Cadmium	LT	.427	UGG		
									7440-47-3	Chromium		14.2	UGG		
									7440-48-4	Cobalt		33.2	UGG		
									7440-50-8	Copper		29.5	UGG		
									7440-62-2	Vanadium		46.1	UGG		
									7440-66-6	Zinc		106	UGG		
									7440-70-2	Calcium		687	UGG		
									7782-49-2	Selenium	LT	12.4	UGG		
									57-12-5	Cyanide	LT	1.22	UGG		
									118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
									121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
									121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
									479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
									78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
									88-72-2	2-Nitrotoluene	LT	.505	UGG		
									99-08-1	3-Nitrotoluene	LT	.251	UGG		
									99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qualis
BORE	91B16	91B163C	15.0	16-FEB-92	PC	51454	LW32/	99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7439-97-6	Mercury		.115	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		16000	UGG		
								7439-89-6	Iron		31000	UGG		
								7439-92-1	Lead		18.7	UGG		
								7439-95-4	Magnesium		842	UGG		
								7439-96-5	Manganese		530	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	28.6	UGG		
								7440-09-7	Potassium		901	UGG		
								7440-23-5	Sodium		159	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		46.2	UGG		
								7440-41-7	Beryllium		1.99	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		16.4	UGG		
								7440-48-4	Cobalt		22.9	UGG		
								7440-50-8	Copper		25.7	UGG		
								7440-62-2	Vanadium		48.3	UGG		
								7440-66-6	Zinc		103	UGG		
								7440-70-2	Calcium		821	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B16	91B164C	18.0	16-FEB-92	51462	PC	LW32/	99-99-0	4-Nitrotoluene	LT	.245	UGG		
		91B165C	24.0	16-FEB-92	51470	PC	00 /		Total petroleum hydrocarbons		15.8	UGG		
							JB06/	7439-97-6	Mercury		.111	UGG		
							JC02/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	7429-90-5	Aluminum		6900	UGG		
								7439-89-6	Iron		19000	UGG		
								7439-92-1	Lead		33.3	UGG		
								7439-95-4	Magnesium		422	UGG		
								7439-96-5	Manganese		1400	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		36.9	UGG		
								7440-09-7	Potassium		448	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		91.6	UGG		
								7440-41-7	Beryllium		1.28	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		9.1	UGG		
								7440-48-4	Cobalt		24.8	UGG		
								7440-50-8	Copper		21.4	UGG		
								7440-62-2	Vanadium		29	UGG		
								7440-66-6	Zinc		82.8	UGG		
								7440-70-2	Calcium		503	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B16	91B165C	24.0	16-FEB-92	PC 51470		LW32/	99-99-0	4-Nitrotoluene	LT	.245	UGG		
		S091B16C	0.5	16-FEB-92	PC 51438		KY04/	57-12-5	Cyanide	LT	1.22	UGG		
		S091B17	5.0	16-FEB-92	PC 51403		KY04/	57-12-5	Cyanide	LT	1.22	UGG		
		S091B171	5.0	16-FEB-92	PC 51403		JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
91B17							JC02/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	7429-90-5	Aluminum	UGG	6300	UGG		
								7439-89-6	Iron	UGG	40000	UGG		
								7439-92-1	Lead	UGG	38.4	UGG		
T								7439-95-4	Magnesium		279	UGG		
								7439-96-5	Manganese		930	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		47.5	UGG		
								7440-41-7	Beryllium		.684	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		51.6	UGG		
								7440-48-4	Cobalt		17.4	UGG		
								7440-50-8	Copper		8.51	UGG		
								7440-62-2	Vanadium		63.8	UGG		
								7440-66-6	Zinc		40.9	UGG		
								7440-70-2	Calcium		428	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Any.	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B17	S091B171	5.0	16-FEB-92	PC	51403	LW32/	99-99-0	4-Nitrotoluene	LT	.245	UGG		
		S091B172	10.0	16-FEB-92	PC	51411	JB06/	7439-97-6	Mercury		.134	UGG		
							JC02/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	7429-90-5	Aluminum		3100	UGG		
								7439-89-6	Iron		9400	UGG		
								7439-92-1	Lead		17.2	UGG		
								7439-95-4	Magnesium		416	UGG		
								7439-96-5	Manganese		590	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	11.6	UGG		
								7440-09-7	Potassium		229	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		33.4	UGG		
								7440-41-7	Beryllium		1.14	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		6.63	UGG		
								7440-48-4	Cobalt		10.7	UGG		
								7440-50-8	Copper		9.52	UGG		
								7440-62-2	Vanadium		20	UGG		
								7440-66-6	Zinc		32.9	UGG		
								7440-70-2	Calcium		756	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis((nitrooxy)me*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B17	S091B173	15.0	16-FEB-92	PC	51420	00 /		Total petroleum hydrocarbons	ND	10	UGG	T	
							JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	7429-90-5	Aluminum		14000	UGG		
								7439-89-6	Iron		29000	UGG		
								7439-92-1	Lead		23.3	UGG		
								7439-95-4	Magnesium		896	UGG		
								7439-96-5	Manganese		440	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		38.5	UGG		
								7440-09-7	Potassium		776	UGG		
								7440-23-5	Sodium		75.6	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		17.6	UGG		
								7440-41-7	Beryllium		1.99	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		15.8	UGG		
								7440-48-4	Cobalt		20.4	UGG		
								7440-50-8	Copper		28	UGG		
								7440-62-2	Vanadium		44.6	UGG		
								7440-66-6	Zinc		119	UGG		
								7440-70-2	Calcium		896	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B18	91B181C	5.0	18-FEB-92	PC	53341	00 / JB06/ JC02/ JS14/ KY04/ LW32/	7439-97-6	Total petroleum hydrocarbons	ND	10	UGG	T
								7440-22-4	Mercury	LT	8.70 E -2	UGG	
								7429-90-5	Silver	LT	1.01	UGG	
								7439-89-6	Aluminum		5450	UGG	
								7439-92-1	Iron		15000	UGG	
								7439-95-4	Lead		21.7	UGG	
								7439-96-5	Magnesium		265	UGG	
								7439-98-7	Manganese		310	UGG	
								7440-02-0	Molybdenum		4	UGG	
								7440-09-7	Nickel	LT	13	UGG	
								7440-23-5	Potassium		235	UGG	
								7440-28-0	Sodium	LT	50	UGG	
								7440-36-0	Thallium	LT	12.5	UGG	
								7440-38-2	Antimony	LT	82.9	UGG	
								7440-39-3	Arsenic	ND	12.7	UGG	
								7440-41-7	Barium		55	UGG	
								7440-43-9	Beryllium		.875	UGG	
								7440-47-3	Cadmium	LT	.427	UGG	
								7440-48-4	Chromium		8.13	UGG	
								7440-50-8	Cobalt		12	UGG	
								7440-62-2	Copper		11.7	UGG	
								7440-66-6	Vanadium		16.2	UGG	
								7440-70-2	Zinc		51	UGG	
								7782-49-2	Calcium		208	UGG	
								57-12-5	Selenium	LT	12.4	UGG	
								118-96-7	Cyanide	LT	1.22	UGG	
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG	
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG	
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG	
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG	
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG	
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG	
606-20-2	2,6-Dinitrotoluene	LT	.5	UGG									
78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG									
88-72-2	2-Nitrotoluene	LT	.505	UGG									
99-08-1	3-Nitrotoluene	LT	.251	UGG									
99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG									
99-65-0	1,3-Dinitrobenzene	LT	.249	UGG									
99-99-0	4-Nitrotoluene	LT	.245	UGG									

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B18	91B181C	5.0	18-FEB-92	PC 53341D		KY04/	57-12-5	Cyanide	LT	1.22	UGG	D	
	91B19	S091B191	5.0	19-FEB-92	PC 54410		00 /	7439-97-6	Total petroleum hydrocarbons	ND	10	UGG	T	
							JC02/	7440-22-4	Mercury		.521	UGG		
							JS14/	7429-90-5	Silver	LT	1.01	UGG		
								7439-89-6	Aluminum		12000	UGG		
								7439-92-1	Iron		27000	UGG		
								7439-92-1	Lead		61.8	UGG		
								7439-95-4	Magnesium		612	UGG		
								7439-96-5	Manganese		234	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		23.3	UGG		
								7440-09-7	Potassium		740	UGG		
								7440-23-5	Sodium		141	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		547	UGG		
								7440-41-7	Beryllium		.776	UGG		
								7440-43-9	Cadmium		6.51	UGG		
								7440-47-3	Chromium		21.2	UGG		
								7440-48-4	Cobalt		20	UGG		
								7440-50-8	Copper		146	UGG		
								7440-62-2	Vanadium		37.9	UGG		
								7440-66-6	Zinc		336	UGG		
								7440-70-2	Calcium		205	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis((nitrooxy)me*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly.	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B19	S091B191	5.0	19-FEB-92	PC	54410	LW32/	99-99-0	4-Nitrotoluene	LT	.245	UGG		
		S091B192	10.0	19-FEB-92	PC	54437	00 / JB06/ JC02/ JS14/	7439-97-6	Total petroleum hydrocarbons		25.8	UGG		
								7440-22-4	Mercury		.44	UGG		
								7429-90-5	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		2030	UGG		
								7439-89-6	Iron		9100	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		208	UGG		
								7439-96-5	Manganese		83	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel		16.2	UGG		
								7440-09-7	Potassium		527	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		14.2	UGG		
								7440-41-7	Beryllium		.549	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		4.21	UGG		
								7440-48-4	Cobalt		6.89	UGG		
								7440-50-8	Copper		12.8	UGG		
								7440-62-2	Vanadium		7.71	UGG		
								7440-66-6	Zinc		48.6	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene		.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly.	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B19	S091B193	12.0	19-FEB-92	PC	54445	LM32/	99-99-0	4-Nitrotoluene	LT	.245	UGG		
	91B20	91B201C	20.0	21-FEB-92	PC	57258	KY04/	57-12-5	Cyanide	LT	1.22	UGG		
		S91B201C	20.0	21-FEB-92	PC	57258	JB06/	7439-97-6	Mercury		.228	UGG		
							JC02/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	7429-90-5	Aluminum		18000	UGG		
								7439-89-6	Iron		28000	UGG		
								7439-92-1	Lead		37.4	UGG		
								7439-95-4	Magnesium		708	UGG		
								7439-96-5	Manganese		640	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	20.6	UGG		
								7440-09-7	Potassium		789	UGG		
								7440-23-5	Sodium		144	UGG		
								7440-28-0	Thallium		12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG	T	
								7440-39-3	Barium	ND	23.3	UGG		
								7440-41-7	Beryllium		.806	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		14.7	UGG		
								7440-48-4	Cobalt		37.7	UGG		
								7440-50-8	Copper		24.3	UGG		
								7440-62-2	Vanadium		48.8	UGG		
								7440-66-6	Zinc		56.3	UGG		
								7440-70-2	Calcium		451	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LM30/	100-01-6	4-Nitroaniline	ND	1.7	UGG	R	
								100-02-7	4-Nitrophenol	LT	2.5	UGG		
								100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
								106-47-8	4-Chloroaniline	ND	3.3 E -2	UGG	R	
								108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B20	S91B201C	20.0	21-FEB-92	PC	57258	LM30/	121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		
								50-32-8	Benzo[a]pyrene	LT	.24	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG		
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene	LT	.17	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B20	S91B201C	20.0	21-FEB-92	PC	57258	LM30/	91-94-1 95-48-7 95-50-1 95-57-8 95-95-4 98-95-3	3,3'-Dichlorobenzidine o-Cresol / 2-Cresol / 2-Methylphenol 1,2-Dichlorobenzene 2-Chlorophenol 2,4,5-Trichlorophenol Nitrobenzene / Essence of mirbane / Oil of mirbane	ND LT LT LT LT LT	.66 .17 .32 .17 .24 .19	UGG UGG UGG UGG UGG UGG	R	
								99-09-2	3-Nitroaniline 4-Bromophenyl phenyl ether 4-Chlorophenyl phenyl ether Unknown compound 533 Unknown compound 537 Unknown compound 581 Unknown compound 629	ND LT LT	1.7 .17 .2 .281 .281 .14 .561	UGG UGG UGG UGG UGG UGG UGG	R	
							LM33/	100-41-4 100-42-5	Ethylbenzene Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	LT LT	5 E -3 5 E -3	UGG UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	6 E -3	UGG		
								107-06-2 108-10-1	1,2-Dichloroethane Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT LT	5 E -3 4 E -2	UGG UGG		
								108-88-3 108-90-7 124-48-1	Toluene Chlorobenzene / Monochlorobenzene Dibromochloromethane / Chlorodibromomethane	LT LT LT	5 E -3 5 E -3 .1	UGG UGG UGG		
								127-18-4	Tetrachloroethylene /	LT	5 E -3	UGG		
								156-59-2	Tetrachloroethene / Perchloroethylen* cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	5 E -3	UGG		
								56-23-5 591-78-6 67-64-1	Carbon tetrachloride Methyl n-butyl ketone / 2-Hexanone Acetone	LT LT LT	6 E -3 4 E -2 9 E -2	UGG UGG UGG		
								67-66-3 71-43-2 71-55-6 74-83-9 74-87-3	Chloroform Benzene 1,1,1-Trichloroethane Bromomethane Chloromethane	LT LT LT LT LT	5 E -3 5 E -3 6 E -3 7 E -2 6 E -3	UGG UGG UGG UGG UGG		
								75-00-3 75-01-4 75-09-2 75-15-0	Chloroethane Vinyl chloride / Chloroethene Methylene chloride / Dichloromethane Carbon disulfide	LT LT LT LT	8 E -3 3 E -2 3 E -2	UGG UGG UGG UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO

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Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B20	S91B201C	20.0	21-FEB-92	PC 57258		LW33/	75-25-2	Bromoform	LT	5 E -3	UGG		
								75-27-4	Bromodichloromethane	LT	5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	6 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	1 E -2	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	1 E -2	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	LT	5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	2 E -2	UGG		
									Xylenes, total combined	LT	2 E -2	UGG		
									trans-1,3-Dichloropropene	LT	5 E -3	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
									2,4-Dinitrotoluene	LT	.251	UGG		
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									Cyclotetramethylenetetranitramine	LT	.499	UGG		
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									2,6-Dinitrotoluene	LT	.5	UGG		
									PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
									2-Nitrotoluene	LT	.505	UGG		
									3-Nitrotoluene	LT	.251	UGG		
									1,3,5-Trinitrobenzene	LT	.25	UGG		
									1,3-Dinitrobenzene	LT	.249	UGG		
									4-Nitrotoluene	LT	.245	UGG		
									Ethylbenzene	LT	2.5 E -3	UGG		
									Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
									cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		
									1,2-Dichloroethane	LT	2.7 E -3	UGG		
									Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	1.9 E -2	UGG		
									Toluene	LT	2.5 E -3	UGG		
									Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B214	33.0	21-FEB-92	PC	58017	LM33/	124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
									127-18-4	Tetrachloroethylene / Tetrachloroethylen*	LT	2.5 E -3	UGG	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
								67-64-1	Acetone	LT	4.5 E -2	UGG		
								67-66-3	Chloroform	LT	2.6 E -3	UGG		
								71-43-2	Benzene	LT	2.5 E -3	UGG		
								71-55-6	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
								74-83-9	Bromomethane	LT	3.1 E -3	UGG		
								74-87-3	Chloromethane	LT	3.5 E -2	UGG		
								75-00-3	Chloroethane	LT	3.0 E -3	UGG		
								75-01-4	Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
								75-09-2	Methylene chloride / Dichloromethane	LT	6.2 E -3	UGG		
								75-15-0	Carbon disulfide	LT	1.4 E -2	UGG		
								75-25-2	Bromoform	LT	2.5 E -3	UGG		
								75-27-4	Bromodichloromethane	LT	2.5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	2.5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene /Trichloroethene / Ethinyl trichloride /T*	LT	2.5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Unknown compound 218		8.392	UGG	S	
									Xylenes, total combined	LT	7.5 E -3	UGG		
									trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum	LT	15000	UGG		
								7439-89-6	Iron	LT	23000	UGG		
								7439-92-1	Lead	LT	19.4	UGG		
								7439-95-4	Magnesium	LT	1020	UGG		
								7439-96-5	Manganese	LT	460	UGG		
		S091B212	10.0	24-FEB-92	PC	57991	99 / JB06/ JC02/ JS14/							

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B212	10.0	24-FEB-92	PC	57991	JS14/	7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium		365	UGG		
								7440-23-5	Sodium		130	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		52.3	UGG		
								7440-41-7	Beryllium		.537	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		36.3	UGG		
								7440-48-4	Cobalt		19.6	UGG		
								7440-50-8	Copper		10.3	UGG		
								7440-62-2	Vanadium		50.6	UGG		
								7440-66-6	Zinc		33.3	UGG		
								7440-70-2	Calcium		455	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LM30/	100-01-6	4-Nitroaniline	ND	1.7	UGG	R	
								100-02-7	4-Nitrophenol	LT	2.5	UGG		
								100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
								106-47-8	4-Chloroaniline	LT	3.3 E -2	UGG	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	.17	UGG		
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzo[fluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)

File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B212	10.0	24-FEB-92	PC	57991	LW30/	207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		
								50-32-8	Benzo[a]pyrene	LT	.24	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG	R	
								53-70-3	Dibenz[a]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene	LT	.17	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anyly.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B212	10.0	24-FEB-92	PC	57991	LM30/		4-Chlorophenyl phenyl ether	LT	.2	UGG	B	
									Unknown compound 533		.117	UGG	S	
									Unknown compound 534		.467	UGG	B	
									Unknown compound 537		.234	UGG	B	
									Unknown compound 581		.117	UGG	B	
									Unknown compound 628		.117	UGG	B	
									Unknown compound 629		.467	UGG	B	
									Unknown compound 641		.818	UGG	S	
									Unknown compound 650		1.051	UGG	S	
									Unknown compound 667		.584	UGG	B	
									Unknown compound 677		.234	UGG	S	
									Ethylbenzene	LT	2.5 E -3	UGG		
									Styrene / Ethenylbenzene / Styrol /	LT	2.5 E -3	UGG		
									Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
									cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		
									1,2-Dichloroethane	LT	2.7 E -3	UGG		
									Methyl isobutyl ketone /	LT	1.9 E -2	UGG		
									Isopropylacetone / 4-Methyl-2-pen*					
									Toluene	LT	2.5 E -3	UGG		
									Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
									Dibromochloromethane /	LT	5.7 E -2	UGG		
									Chlorodibromomethane					
									Tetrachloroethylene /	LT	2.5 E -3	UGG		
									Tetrachloroethene / Perchloroethylen*					
									cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
									trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
									Carbon tetrachloride	LT	3.1 E -3	UGG		
									Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
									Acetone	LT	4.5 E -2	UGG		
									Chloroform	LT	2.6 E -3	UGG		
									Benzene	LT	2.5 E -3	UGG		
									1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
									Bromomethane	LT	3.1 E -3	UGG		
									Chloromethane	LT	3.5 E -2	UGG		
									Chloroethane	LT	3.0 E -3	UGG		
									Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
									Methylene chloride / Dichloromethane	LT	6.2 E -3	UGG		
									Carbon disulfide	LT	1.4 E -2	UGG		
									Bromoform	LT	2.5 E -3	UGG		
									Bromodichloromethane	LT	2.5 E -3	UGG		
									1,1-Dichloroethane	LT	2.5 E -3	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B212	10.0	24-FEB-92	PC 57991		LM33/	75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG		R
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	LT	2.5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Xylenes, total combined	LT	7.5 E -3	UGG		
									trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
							LM32/	118-96-7	2,4-Dinitrotoluene	LT	.251	UGG		
								121-14-2	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								7439-97-6	Mercury		.188	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		27000	UGG		
								7439-89-6	Iron		42000	UGG		
								7439-92-1	Lead		34.6	UGG		
								7439-95-4	Magnesium		1990	UGG		
								7439-96-5	Manganese		1500	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	32.5	UGG		
								7440-09-7	Potassium		928	UGG		
								7440-23-5	Sodium		106	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B214	33.0	24-FEB-92	PC	58017	JS14/	7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		68.1	UGG		
								7440-41-7	Beryllium		2.89	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		26.9	UGG		
								7440-48-4	Cobalt		25.4	UGG		
								7440-50-8	Copper		35	UGG		
								7440-62-2	Vanadium		67.3	UGG		
								7440-66-6	Zinc		102	UGG		
								7440-70-2	Calcium		1730	UGG		
								7782-49-2	Selenium		12.4	UGG		
							LM30/	100-01-6	4-Nitroaniline	LT	1.7	UGG	R	
								100-02-7	4-Nitrophenol	LT	2.5	UGG		
								100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
								106-47-8	4-Chloroaniline	LT	3.3 E -2	UGG	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	.17	UGG		
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		
								50-32-8	Benzo[a]pyrene	LT	.24	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG	R	
								53-70-3						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B214	33.0	24-FEB-92	58017	PC	LW30/	53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[fa]anthracene	LT	.17	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-55-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 533		.14	UGG	B	
									Unknown compound 537		.28	UGG	B	
									Unknown compound 581		.14	UGG	B	
									Unknown compound 629		.559	UGG	B	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B214	33.0	24-FEB-92	PC	58017	LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Irinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum	LT	17000	UGG		
								7439-89-6	Iron	LT	20000	UGG		
								7439-92-1	Lead	LT	49.8	UGG		
								7439-95-4	Magnesium	LT	1120	UGG		
								7439-96-5	Manganese	LT	2000	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	12.3	UGG		
								7440-09-7	Potassium	LT	394	UGG		
								7440-23-5	Sodium	LT	113	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium	LT	78.5	UGG		
								7440-41-7	Beryllium	LT	.543	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium	LT	16.9	UGG		
								7440-48-4	Cobalt	UGG	40.2	UGG		
								7440-50-8	Copper	UGG	11.3	UGG		
								7440-62-2	Vanadium	UGG	42.1	UGG		
								7440-66-6	Zinc	UGG	39	UGG		
								7440-70-2	Calcium	UGG	528	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								100-01-6	4-Nitroaniline	ND	1.7	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B219	10.0	24-FEB-92	58009			LM30/	100-02-7	4-Nitrophenol	LT	2.5	UGG		
									100-51-6	Benzyl alcohol	LT	.17	UGG		
									105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
									106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
									106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
									106-47-8	4-Chloroaniline	ND	3.3 E -2	UGG		
									108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		
									108-95-2	Phenol / Carbolic acid / Phenic acid / Phenylc acid / Phe*	LT	.17	UGG		
									111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
									111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
									117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
									117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
									118-74-1	Hexachlorobenzene	LT	.26	UGG		
									120-12-7	Anthracene	LT	.17	UGG		
									120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
									120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
									121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
									129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
									131-11-3	Dimethyl phthalate	LT	.17	UGG		
									132-64-9	Dibenzofuran	LT	.17	UGG		
									191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
									193-39-5	Indeno[1,2,3-c,d]pyrene	LT	.17	UGG		
									205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.73	UGG		
									206-44-0	Fluoranthene	LT	.17	UGG		
									207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
									208-96-8	Acenaphthylene	LT	.27	UGG		
									218-01-9	Chrysene	LT	.27	UGG		
									50-32-8	Benzo[a]pyrene	LT	.24	UGG		
									51-28-5	2,4-Dinitrophenol	ND	1.7	UGG		
									53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
									534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
									541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
									56-55-3	Benzo[a]anthracene	LT	.17	UGG		
									59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
									621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
									65-85-0	Benzoic acid	LT	.92	UGG		
									67-72-1	Hexachloroethane	LT	.17	UGG		
									77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B21	S091B219	10.0	24-FEB-92	PC	58009	LM30/	78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 533		.236	UGG	B	
									Unknown compound 537		.118	UGG	B	
									Unknown compound 581		.118	UGG	B	
									Unknown compound 629		.472	UGG	B	
							LM33/	100-41-4	Ethylbenzene	LT	2.5 E -3	UGG		
								100-42-5	Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		
								107-06-2	1,2-Dichloroethane	LT	2.7 E -3	UGG		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	1.9 E -2	UGG		
								108-88-3	Toluene	LT	2.5 E -3	UGG		
								108-90-7	Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
								127-18-4						

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quials
BORE	91B21	S091B219	10.0	24-FEB-92	58009	PC		LM33/	127-18-4	Tetrachloroethylene /	LT	2.5 E -3	UGG		
									156-59-2	Tetrachloroethene / Perchloroethylen* cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
									156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
									56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
									591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
									67-64-1	Acetone	LT	3.8 E -2	UGG		
									67-66-3	Chloroform	LT	2.6 E -3	UGG		
									71-43-2	Benzene	LT	2.5 E -3	UGG		
									71-55-6	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
									74-83-9	Bromomethane	LT	2.5 E -3	UGG		
									74-87-3	Chloromethane	LT	3.1 E -3	UGG		
									75-00-3	Chloroethane	LT	3.5 E -2	UGG		
									75-01-4	Vinyl chloride / Chloroethene	LT	3.0 E -3	UGG		
									75-09-2	Methylene chloride / Dichloromethane	LT	3.8 E -3	UGG		
									75-15-0	Carbon disulfide	LT	6.2 E -3	UGG		
									75-25-2	Bromoform	LT	1.4 E -2	UGG		
									75-27-4	Bromodichloromethane	LT	2.5 E -3	UGG		
									75-34-3	1,1-Dichloroethane	LT	2.5 E -3	UGG		
									75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
									75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
									78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
									78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
									79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
									79-01-6	Trichloroethylene /Trichloroethene / Ethinyl trichloride /T*	LT	2.5 E -3	UGG		
									79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
										Unknown compound 077		.106	UGG	S	
										Xylenes, total combined	LT	7.5 E -3	UGG		
										trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
										2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
										2,4-Dinitrotoluene	LT	.251	UGG		
										RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
										Cyclotetramethylenetetranitramine	LT	.499	UGG		
										Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
										Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CSO
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Unit Meas.	Flag Codes	Data Qual's
BORE	91B21	S091B219	10.0	24-FEB-92	PC	58009	606-20-2 78-11-5	2,6-Dinitrotoluene	LT	UGG		
								PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	UGG	.5	
								2-Nitrotoluene			2.5	
								3-Nitrotoluene	LT	UGG	.505	
								1,3,5-Trinitrobenzene	LT	UGG	.251	
								1,3-Dinitrobenzene	LT	UGG	.25	
								4-Nitrotoluene	LT	UGG	.249	
								Silver	LT	UGG	.245	
								Aluminum	LT	UGG	1.01	
								Iron		UGG	12000	
					PC	57088	7429-90-5		UGG	17000		
							Lead		UGG	20.4		
							Magnesium		UGG	499		
							Manganese		UGG	225		
							Nickel	LT	UGG	4		
							Potassium	LT	UGG	7.5		
							Sodium		UGG	228		
							Thallium	LT	UGG	85.4		
							Antimony	LT	UGG	12.5		
							Arsenic	ND	UGG	82.9		
							Barium		UGG	12.7		
							Beryllium	LT	UGG	17.5		
							Cadmium	LT	UGG	.25		
							Chromium		UGG	.427		
							Cobalt		UGG	12.2		
							Copper		UGG	10.6		
							Vanadium		UGG	8.24		
							Zinc		UGG	33		
							Calcium		UGG	27.2		
							Selenium		UGG	427		
							Cyanide	LT	UGG	12.4		
							4-Nitroaniline	LT	UGG	1.22		
							4-Nitrophenol	ND	UGG	1.7		
							Benzyl alcohol	LT	UGG	2.5		
							2,4-Dimethylphenol	LT	UGG	.17		
p-Cresol / 4-Cresol / 4-Methylphenol	LT	UGG	.33									
1,4-Dichlorobenzene	LT	UGG	.18									
4-Chloroaniline	LT	UGG	.17									
Bis(2-chloroisopropyl) ether	ND	UGG	3.3 E -2									
Phenol / Carbolic acid / Phenic acid	LT	UGG	.17									
/ Phenylic acid / Phe*			.17									
Bis(2-chloroethyl) ether												
Bis(2-chloroethoxy) methane												
	91B22	91B2221C	17.0	21-FEB-92	PC	57088	111-44-4	LT	UGG	1.6		
							111-91-1	LT	UGG	.17		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91822	918221C	17.0	21-FEB-92	57088	PC	LM30/	117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-c,d]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		
								50-32-8	Benzo[a]pyrene	LT	.24	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG		
								53-70-3	Dibenz[a,h]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene	LT	.17	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B22	91B221C	17.0	21-FEB-92	PC	57088	LM30/	88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 533		.241	UGG	B	
									Unknown compound 537		.362	UGG	S	
									Unknown compound 582		.121	UGG	S	
									Unknown compound 594		.121	UGG	S	
									Unknown compound 615		.121	UGG	S	
									Unknown compound 618		.121	UGG	S	
									Unknown compound 619		.121	UGG	S	
									Unknown compound 624		.241	UGG	S	
									Unknown compound 628		.241	UGG	S	
									Unknown compound 629		.241	UGG	S	
									Unknown compound 632		.603	UGG	B	
									Unknown compound 637		.362	UGG	S	
									Unknown compound 642		.362	UGG	S	
									Unknown compound 649		.362	UGG	S	
									Unknown compound 655		.362	UGG	S	
									Unknown compound 661		.241	UGG	S	
									Unknown compound 667		.121	UGG	S	
									Unknown compound 668		.241	UGG	S	
									Unknown compound 669		.241	UGG	S	
									Unknown compound 675		.362	UGG	S	
							LM33/	100-41-4	Ethylbenzene	LT				
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	2.5 E -3	UGG		
								107-06-2	1,2-Dichloroethane	LT	3.0 E -3	UGG		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	2.7 E -3	UGG		
										LT	1.9 E -2	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual
BORE	91B22	91B221C	17.0	21-FEB-92	PC	57088	LW33/	108-88-3	Toluene	LT	2.5 E -3	UGG		
								108-90-7	Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
								127-18-4	Tetrachloroethylene /	LT	2.5 E -3	UGG		
								156-59-2	Tetrachloroethene / Perchloroethylen* cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
								67-64-1	Acetone	LT	6.4 E -2	UGG		
								67-66-3	Chloroform	LT	2.6 E -3	UGG		
								71-43-2	Benzene	LT	2.5 E -3	UGG		
								71-55-6	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
								74-83-9	Bromomethane	LT	3.1 E -3	UGG		
								74-87-3	Chloromethane	LT	3.5 E -2	UGG		
								75-00-3	Chloroethane	LT	3.0 E -3	UGG		
								75-01-4	Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
								75-09-2	Methylene chloride / Dichloromethane	LT	6.2 E -3	UGG		
								75-15-0	Carbon disulfide	LT	1.4 E -2	UGG		
								75-25-2	Bromoform	LT	2.5 E -3	UGG		
								75-27-4	Bromodichloromethane	LT	2.5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	2.5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene /Trichloroethene / Ethinyl trichloride /T*	LT	2.5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Xylenes, total combined	LT	7.5 E -3	UGG		
									trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
							LW32/	118-96-7	2,4-Dinitrotoluene	LT	.251	UGG		
								121-14-2	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8						

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 File Type: CSO
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B22	91B221C	17.0	21-FEB-92	PC 57088		LM32/	479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum	LT	15000	UGG		
								7439-89-6	Iron	UGG	16000	UGG		
								7439-92-1	Lead		36.5	UGG		
								7439-95-4	Magnesium		575	UGG		
								7439-96-5	Manganese		9.07	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	301	UGG		
								7440-23-5	Sodium		85.3	UGG		
								7440-28-0	Thallium		12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		18.8	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		11.3	UGG		
								7440-48-4	Cobalt		17.6	UGG		
								7440-50-8	Copper		8.61	UGG		
								7440-62-2	Vanadium		34.3	UGG		
								7440-66-6	Zinc		25.8	UGG		
								7440-70-2	Calcium		415	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Selenide	LT	1.22	UGG		
								100-01-6	4-Nitroaniline	ND	1.7	UGG		
								100-02-7	4-Nitrophenol	LT	2.5	UGG		
								100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91822	918222C	100.0	21-FEB-92	57096	LM30/	PC	LM30/	106-47-8	4-Chloroaniline	ND	3.3 E -2	UGG	R	
									108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		
									108-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	LT	.17	UGG		
									111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
									111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
									117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
									117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
									118-74-1	Hexachlorobenzene	LT	.26	UGG		
									120-12-7	Anthracene	LT	.17	UGG		
									120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
									120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
									121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
									129-00-0	Benzoidefjphenanthrene / Pyrene	LT	.97	UGG		
									131-11-3	Dimethyl phthalate	LT	.17	UGG		
									132-64-9	Dibenzofuran	LT	.17	UGG		
									191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
									193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17	UGG		
									205-99-2	Benzo[b]fluoranthene / 3,4-Benzo[fluoranthene	LT	.73	UGG		
									206-44-0	Fluoranthene	LT	.17	UGG		
									207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
									208-96-8	Acenaphthylene	LT	.27	UGG		
									218-01-9	Chrysene	LT	.27	UGG		
									50-32-8	Benzo[a]pyrene	LT	.24	UGG		
									51-28-5	2,4-Dinitrophenol	ND	1.7	UGG	R	
									53-70-3	Dibenz[a,h]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
									534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
									541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
									56-55-3	Benzo[a]anthracene	LT	.17	UGG		
									59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
									621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
									65-85-0	Benzoic acid	LT	.92	UGG		
									67-72-1	Hexachloroethane	LT	.17	UGG		
									77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
									78-59-1	Isophorone	LT	.32	UGG		
									83-32-9	Acenaphthene	LT	.27	UGG		
									84-66-2	Diethyl phthalate	LT	.35	UGG		
									84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
									85-01-8	Phenanthrene	LT	.17	UGG		

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B22	91B222C	100.0	21-FEB-92	PC 57096		LM30/	85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 533		.241	UGG	B	
									Unknown compound 537		.12	UGG	B	
									Unknown compound 581		.241	UGG	S	
									Unknown compound 629		.482	UGG	B	
									Unknown compound 652		.12	UGG	S	
							LM33/	100-41-4	Ethylbenzene	LT	5 E -3	UGG		
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	LT	5 E -3	UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	6 E -3	UGG		
								107-06-2	1,2-Dichloroethane	LT	5 E -3	UGG		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	4 E -2	UGG		
								108-88-3	Toluene	LT	5 E -3	UGG		
								108-90-7	Chlorobenzene / Monochlorobenzene	LT	5 E -3	UGG		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	.1	UGG		
								127-18-4	Tetrachloroethylene / Tetrachloroethene / Perchloroethylen*	LT	5 E -3	UGG		
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	5 E -3	UGG		
								156-60-5						

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B22	91B222C	100.0	21-FEB-92	57096	PC	LM33/	156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	6 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	4 E -2	UGG		
								67-64-1	Acetone	LT	.1	UGG		
								67-66-3	Chloroform	LT	5 E -3	UGG		
								71-43-2	Benzene	LT	5 E -3	UGG		
								71-55-6	1,1,1-Trichloroethane	LT	5 E -3	UGG		
								74-83-9	Bromomethane	LT	6 E -3	UGG		
								74-87-3	Chloromethane	LT	7 E -2	UGG		
								75-00-3	Chloroethane	LT	6 E -3	UGG		
								75-01-4	Vinyl chloride / Chloroethene	LT	8 E -3	UGG		
								75-09-2	Methylene chloride / Dichloromethane	LT	2 E -2	UGG	8	
								75-15-0	Carbon disulfide	LT	3 E -2	UGG		
								75-25-2	Bromoform	LT	5 E -3	UGG		
								75-27-4	Bromodichloromethane	LT	5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	6 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	1 E -2	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	1 E -2	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	LT	5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	2 E -2	UGG		
									Xylenes, total combined	LT	2 E -2	UGG		
									trans-1,3-Dichloropropene	LT	5 E -3	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
									2,4-Dinitrotoluene	LT	.251	UGG		
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									Cycloctetramethylenetetranitramine	LT	.499	UGG		
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									2,6-Dinitrotoluene	LT	.5	UGG		
									PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
									2-Nitrotoluene	LT	.505	UGG		
									3-Nitrotoluene	LT	.251	UGG		

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B22	91B222C	100.0	21-FEB-92	PC 57096		LW32/	99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		12000	UGG		
								7439-89-6	Iron		47000	UGG		
								7439-92-1	Lead		51.6	UGG		
								7439-95-4	Magnesium		1560	UGG		
								7439-96-5	Manganese		960	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	41.3	UGG		
								7440-09-7	Potassium		812	UGG		
								7440-23-5	Sodium		72	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		53.6	UGG		
								7440-41-7	Beryllium		3.5	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		23.6	UGG		
								7440-48-4	Cobalt		37.3	UGG		
								7440-50-8	Copper		44.4	UGG		
								7440-62-2	Vanadium		75.4	UGG		
								7440-66-6	Zinc		92.5	UGG		
								7440-70-2	Calcium		1450	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum		17000	UGG		
								7439-89-6	Iron		49000	UGG		
								7439-92-1	Lead		55.2	UGG		
								7439-95-4	Magnesium		1550	UGG		
								7439-96-5	Manganese		1300	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	50.3	UGG		
								7440-09-7	Potassium		734	UGG		
								7440-23-5	Sodium		93.5	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		59	UGG		
								7440-41-7	Beryllium		3.66	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		22.8	UGG		
								7440-48-4	Cobalt		54.1	UGG		

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B23	S091B23	100.0	07-FEB-92	PC 42331		JS14/	7440-50-8	Copper		49.5	UGG		
								7440-62-2	Vanadium		76.5	UGG		
								7440-66-6	Zinc		94.4	UGG		
								7440-70-2	Calcium		1860	UGG		
								7782-49-2	Selenium		12.4	UGG		
								7439-97-6	Mercury	LT	.215	UGG		
								100-01-6	4-Nitroaniline	ND	1.7	UGG	R	
								100-02-7	4-Nitrophenol	LT	2.5	UGG		
								100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
		S091B23C	37.5	06-FEB-92 07-FEB-92	PC 42323 PC 42323		JB06/ LW30/	106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
								106-47-8	4-Chloroaniline	ND	.33	UGG	R	
								108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[de]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzo[fluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		
								50-32-8	Benzo[a]pyrene	LT	.24	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene	LT	.17	UGG		

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B23	S091B23C	37.5	07-FEB-92	PC 42323		LW30/	59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
								87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	LT	.66	UGG		
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	.17	UGG	R	
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 531		.132	UGG	B	
									Unknown compound 535		.265	UGG	S	
									Unknown compound 631		.397	UGG	B	
									Ethylbenzene	LT	2.5 E -3	UGG		
									Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
								100-41-4	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		
								100-42-5	1,2-Dichloroethane	LT	2.7 E -3	UGG		
								10061-01-5						
								107-06-2						
								108-10-1						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)

File Type: CS0
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B23	S091B23C	37.5	07-FEB-92	PC	42323	LM33/	108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	1.9 E -2	UGG		
								108-88-3	Toluene	LT	2.5 E -3	UGG		
								108-90-7	Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
								127-18-4	Tetrachloroethylene / Tetrachloroethene / Perchloroethylen*	LT	2.5 E -3	UGG		
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
								67-64-1	Acetone	LT	4.5 E -2	UGG		
								67-66-3	Chloroform	LT	2.6 E -3	UGG		
								71-43-2	Benzene	LT	2.5 E -3	UGG		
								71-55-6	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
								74-83-9	Bromomethane	LT	3.1 E -3	UGG		
								74-87-3	Chloroethane	LT	3.5 E -2	UGG		
								75-00-3	Chloroethane	LT	3.0 E -3	UGG		
								75-01-4	Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
								75-09-2	Methylene chloride / Dichloromethane	LT	6.2 E -3	UGG		
								75-15-0	Carbon disulfide	LT	1.4 E -2	UGG		
								75-25-2	Bromoform	LT	2.5 E -3	UGG		
								75-27-4	Bromodichloromethane	LT	2.5 E -3	UGG		
								75-34-3	1,1-Dichloroethane	LT	2.5 E -3	UGG		
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG		
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride /T*		1.1 E -2	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Xylenes, total combined	LT	7.5 E -3	UGG		
									trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
	2,4-Dinitrotoluene	LT	.251	UGG										
	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG										

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B23	S091B23C	37.5	07-FEB-92	PC 42323		LW32/S	2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	.499 1.27	UGG UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate /	LT LT	.5 2.5	UGG UGG		
								88-72-2	2,2-Bis[(nitrooxy)me*]	LT	.505	UGG		
								99-08-1	2-Nitrotoluene	LT	.251	UGG		
								99-35-4	3-Nitrotoluene	LT	.25	UGG		
								99-65-0	1,3,5-Trinitrobenzene	LT	.249	UGG		
								99-99-0	1,3-Dinitrobenzene	LT	.245	UGG		
								7439-97-6	4-Nitrotoluene	LT	.248	UGG		
			100.0	07-FEB-92	PC 42331		JB06/ LM30/	100-01-6	Mercury	ND	1.7	UGG	R	
								100-02-7	4-Nitroaniline	LT	2.5	UGG		
								100-51-6	4-Nitrophenol	LT	.17	UGG		
								105-67-9	Benzyl alcohol	LT	.33	UGG		
								106-44-5	2,4-Dimethylphenol	LT	.18	UGG		
								106-46-7	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.33	UGG		
								106-47-8	1,4-Dichlorobenzene	LT	.17	UGG		
								108-60-1	4-Chloroaniline	ND	.33	UGG	R	
								108-95-2	Bis(2-chloroisopropyl) ether Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		
								111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.17	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.25	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.17 .73	UGG UGG		
								206-44-0	Fluoranthene	LT	.17	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene	LT	.27	UGG		

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

11:02:38

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B23	S091B23C	100.0	07-FEB-92	42331	LM30/	PC								
									50-32-8	Benzo[a]pyrene	LT	.24	UGG		
									51-28-5	2,4-Dinitrophenol	ND	1.7	UGG		
									53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
									534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
									541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
									56-55-3	Benzo[a]anthracene	LT	.17	UGG		
									59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
									621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
									65-85-0	Benzoic acid	LT	.92	UGG		
									67-72-1	Hexachloroethane	LT	.17	UGG		
									77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
									78-59-1	Isophorone	LT	.32	UGG		
									83-32-9	Acenaphthene	LT	.27	UGG		
									84-66-2	Diethyl phthalate	LT	.35	UGG		
									84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
									85-01-8	Phenanthrene	LT	.17	UGG		
									85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
									86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
									86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
									87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		
									87-86-5	Pentachlorophenol	LT	.48	UGG		
									88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
									88-74-4	2-Nitroaniline	LT	.36	UGG		
									88-75-5	2-Nitrophenol	LT	.26	UGG		
									91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
									91-57-6	2-Methylnaphthalene	LT	.17	UGG		
									91-58-7	2-Chloronaphthalene	LT	.33	UGG		
									91-94-1	3,3'-Dichlorobenzidine	ND	.66	UGG		
									95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	.17	UGG		
									95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
									95-57-8	2-Chlorophenol	LT	.17	UGG		
									95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
									98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
									99-09-2	3-Nitroaniline	ND	1.7	UGG		
										4-Bromophenyl phenyl ether	LT	.17	UGG		
										4-Chlorophenyl phenyl ether	LT	.2	UGG		
										Unknown compound 535		.133	UGG		
										Unknown compound 631		.265	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B23	S091B23C	100.0	07-FEB-92	PC 42331		LM33/	100-41-4	Ethylbenzene	LT	2.5 E -3	UGG		
								100-42-5	Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	3.0 E -3	UGG		
								107-06-2	1,2-Dichloroethane	LT	2.7 E -3	UGG		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	1.9 E -2	UGG		
								108-88-3	Toluene	LT	2.5 E -3	UGG		
								108-90-7	Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
								127-18-4	Tetrachloroethylene /	LT	2.5 E -3	UGG		
								156-59-2	Tetrachloroethene / Perchloroethylen* cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
								56-23-5	Carbon tetrachloride	LT	3.1 E -3	UGG		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
								67-64-1	Acetone	LT	4.5 E -2	UGG		
								71-43-2	Chloroform	LT	2.6 E -3	UGG		
								71-55-6	Benzene	LT	2.5 E -3	UGG		
								74-83-9	1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
								74-87-3	Bromomethane	LT	3.1 E -3	UGG		
								75-00-3	Chloromethane	LT	3.5 E -2	UGG		
								75-01-4	Chloroethane	LT	3.0 E -3	UGG		
								75-09-2	Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
								75-15-0	Methylene chloride / Dichloromethane	LT	6.2 E -3	UGG		
								75-25-2	Carbon disulfide	LT	1.4 E -2	UGG		
								75-27-4	Bromoform	LT	2.5 E -3	UGG		
								75-34-3	Bromodichloromethane	LT	2.5 E -3	UGG		
								75-35-4	1,1-Dichloroethane	LT	2.5 E -3	UGG		
									1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone	LT	5.1 E -3	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	LT	2.5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	LT	1.2 E -2	UGG		
									Unknown compound 078		.009283820167	UGG	S	

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

11:02:38

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSO
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
BORE	91B23	S091B23C	100.0	07-FEB-92	PC 42331	LW33/	118-96-7	Xylenes, total combined	LT	7.5 E -3	UGG		
							121-14-2	trans-1,3-Dichloropropene	LT	2.5 E -3	UGG		
							121-82-4	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
							2691-41-0	2,4-Dinitrotoluene	LT	.251	UGG		
							479-45-8	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
							55-63-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
							606-20-2	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
							78-11-5	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
							88-72-2	2,6-Dinitrotoluene	LT	.5	UGG		
							99-08-1	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
							99-35-4	2-Nitrotoluene	LT	.505	UGG		
							99-65-0	3-Nitrotoluene	LT	.251	UGG		
							99-99-0	1,3,5-Trinitrobenzene	LT	.25	UGG		
								1,3-Dinitrobenzene	LT	.249	UGG		
								4-Nitrotoluene	LT	.245	UGG		
91B24	91B241C		10.0	13-FEB-92	PC 49174	00 /		Total petroleum hydrocarbons	ND	10	UGG	T	
	91B243C		20.0	13-FEB-92	PC 49174D	00 /		Total petroleum hydrocarbons	ND	10	UGG	T	
	91B244C		30.0	13-FEB-92	PC 49182	00 /		Total petroleum hydrocarbons	ND	62.8	UGG		
	91B245C		40.0	13-FEB-92	PC 49190	00 /		Total petroleum hydrocarbons	ND	10	UGG	T	
					PC 49204	00 /		Total petroleum hydrocarbons	ND	20.4	UGG		

** End of Report - 2292 Records Found **

* - Analyte Description has been truncated. See Data Dictionary

Appendix H
Sediment Data

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
CREK	S8SD1	S8SD1	0.0	04-MAR-92	66508	PC	KY04/	57-12-5	Cyanide	LT	1.22	UGG		
					66508D		KY04/	57-12-5	Cyanide	LT	1.22	UGG		
					66508	PC	JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	7429-90-5	Aluminum		15000	UGG		
								7439-89-6	Iron		29000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium		515	UGG		
								7439-96-5	Manganese		192	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	14.3	UGG		
								7440-09-7	Potassium		846	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG		
								7440-39-3	Barium		24.6	UGG		
								7440-41-7	Beryllium		.57	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		16.8	UGG		
								7440-48-4	Cobalt		22.5	UGG		
								7440-50-8	Copper		21.7	UGG		
								7440-62-2	Vanadium		48.5	UGG		
								7440-66-6	Zinc		54.4	UGG		
								7440-70-2	Calcium		220	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

11:06:48

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AM)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
CREK	S8SD2	S8SD2	0.0	04-MAR-92	66516	PC	66516	KY04/	57-12-5	Cyanide	LT	1.22	UGG		
		S8SD2	0.0	04-MAR-92	66516	PC	66516	JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
								JC02/	7440-22-4	Silver	LT	1.01	UGG		
								JS14/	7429-90-5	Aluminum		16000	UGG		
									7439-89-6	Iron		12000	UGG		
									7439-92-1	Lead		19.1	UGG		
									7439-95-4	Magnesium		649	UGG		
									7439-96-5	Manganese		540	UGG		
									7439-98-7	Molybdenum		4	UGG		
									7440-02-0	Nickel	LT	12.8	UGG		
									7440-09-7	Potassium		607	UGG		
									7440-23-5	Sodium	LT	50	UGG		
									7440-28-0	Thallium	LT	12.5	UGG		
									7440-36-0	Antimony	LT	82.9	UGG		
									7440-38-2	Arsenic	ND	12.7	UGG		
									7440-39-3	Barium		59.6	UGG		
									7440-41-7	Beryllium		.498	UGG		
									7440-43-9	Cadmium	LT	.427	UGG		
									7440-47-3	Chromium		15.9	UGG		
									7440-48-4	Cobalt		20.7	UGG		
									7440-50-8	Copper		12.3	UGG		
									7440-62-2	Vanadium		29.4	UGG		
									7440-66-6	Zinc		42.4	UGG		
									7440-70-2	Calcium	LT	109	UGG		
									7782-49-2	Selenium	LT	12.4	UGG		
								LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
									121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
									121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
									479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
									78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
									88-72-2	2-Nitrotoluene	LT	.505	UGG		
									99-08-1	3-Nitrotoluene	LT	.251	UGG		
									99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
									99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
									99-99-0	4-Nitrotoluene	LT	.245	UGG		
									57-12-5	Cyanide	LT	1.22	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
CREK	S8SD3	S8SD3D	0.0	04-MAR-92	66532	PC	KY04/	57-12-5	Cyanide	LT	1.22	UGG		
		S8SD3	0.0	04-MAR-92	66524	PC	JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/	7440-22-4	Silver	LT	1.01	UGG		
							JS14/	7429-90-5	Aluminum		13000	UGG		
								7439-89-6	Iron		41000	UGG		
								7439-92-1	Lead		14.7	UGG		
								7439-95-4	Magnesium		334	UGG		
								7439-96-5	Manganese		740	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	376	UGG		
								7440-23-5	Sodium		81.5	UGG		
								7440-28-0	Thallium		12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG		
								7440-39-3	Barium	ND	73.9	UGG		
								7440-41-7	Beryllium		.704	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		18.7	UGG		
								7440-48-4	Cobalt		32.1	UGG		
								7440-50-8	Copper		21	UGG		
								7440-62-2	Vanadium		47.9	UGG		
								7440-66-6	Zinc		37.7	UGG		
								7440-70-2	Calcium		237	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene		.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
		S8SD3D	0.0	04-MAR-92	66532	PC	JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSE
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals																
CREK	S8SD3	S8SD3D	0.0	04-MAR-92	PC	66532	JC02/ JS14/	7440-22-4	Silver	LT	1.01	UGG																		
								7429-90-5	Aluminum		20000	UGG																		
								7439-89-6	Iron		48000	UGG																		
								7439-92-1	Lead		18.3	UGG																		
								7439-95-4	Magnesium		572	UGG																		
								7439-96-5	Manganese		330	UGG																		
								7439-98-7	Molybdenum		4	UGG																		
								7440-02-0	Nickel	LT	15.2	UGG																		
								7440-09-7	Potassium		736	UGG																		
								7440-23-5	Sodium		91.5	UGG																		
								7440-28-0	Thallium		12.5	UGG																		
								7440-36-0	Thallium	LT	12.5	UGG																		
								7440-38-2	Antimony	LT	82.9	UGG																		
								7440-39-3	Arsenic	ND	12.7	UGG																		
								7440-41-7	Barium		30.4	UGG																		
								7440-43-9	Beryllium		.771	UGG																		
								7440-47-3	Cadmium	LT	.427	UGG																		
								7440-48-4	Chromium		51.5	UGG																		
								7440-50-8	Cobalt		28.9	UGG																		
																7440-62-2	Copper		24.7	UGG										
7440-66-6	Zinc		57	UGG																										
7440-70-2	Vanadium		53.9	UGG																										
7782-49-2	Selenium		238	UGG																										
118-96-7	Calcium	LT	12.4	UGG																										
																2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG	D										
																121-14-2	2,4-Dinitrotoluene	LT	.251	UGG	D									
																121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG	D									
																2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG	D									
																		479-45-8	Tetryl / N-Methyl-N, 2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG	D							
																55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG	D									
																								2,6-Dinitrotoluene	LT	.5	UGG	D		
																								606-20-2	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG	D	
																								88-72-2	2-Nitrotoluene	LT	.505	UGG	D	
																								99-08-1	3-Nitrotoluene	LT	.251	UGG	D	
99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG	D																									
																99-65-0	1,3-Dinitrobenzene	LT	.249	UGG	D									
																99-99-0	4-Nitrotoluene	LT	.245	UGG	D									
																57-12-5	Cyanide	LT	1.22	UGG										
																7439-97-6	Mercury	LT	8.70 E -2	UGG										
								7440-22-4	Silver	LT	1.01	UGG																		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
CREK	S8SD4	S8SD4	0.0	04-MAR-92	PC 66540	JS14/	7429-90-5	Aluminum		17000	UGG		
							7439-89-6	Iron		37000	UGG		
							7439-92-1	Lead		24	UGG		
							7439-95-4	Magnesium		613	UGG		
							7439-96-5	Manganese		1200	UGG		
							7439-98-7	Molybdenum		4	UGG		
							7440-02-0	Nickel	LT	28.9	UGG		
							7440-09-7	Potassium		735	UGG		
							7440-23-5	Sodium		80.9	UGG		
							7440-28-0	Thallium	LT	12.5	UGG		
							7440-36-0	Antimony	LT	82.9	UGG		
							7440-38-2	Arsenic	ND	12.7	UGG		
							7440-39-3	Barium		56.3	UGG		
							7440-41-7	Beryllium		.997	UGG		
							7440-43-9	Cadmium	LT	.427	UGG		
							7440-47-3	Chromium		19.6	UGG		
							7440-48-4	Cobalt		55.8	UGG		
							7440-50-8	Copper		33.9	UGG		
							7440-62-2	Vanadium		52	UGG		
							7440-66-6	Zinc		87.3	UGG		
							7440-70-2	Calcium		358	UGG		
							7782-49-2	Selenium	LT	12.4	UGG		
						LW32/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
							121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
							121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
							2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
							479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
							55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
							606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
							78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]	LT	2.5	UGG		
							88-72-2	2-Nitrotoluene	LT	.505	UGG		
							99-08-1	3-Nitrotoluene	LT	.251	UGG		
							99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
							99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
							99-99-0	4-Nitrotoluene	LT	.245	UGG		
SKHL	S5SD	S5SD	0.5	09-FEB-92	PC 44121	LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
							121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
							121-82-4	2,4-Dinitrotoluene	LT		UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SD	S5SD	0.5	09-FEB-92	PC 44121	PC	LW32/S	121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
								7439-97-6	Mercury	LT	8.70 E -2	UGG		
								7440-22-4	Silver	LT	1.01	UGG		
								7429-90-5	Aluminum	LT	8900	UGG		
								7439-89-6	Iron	LT	20000	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese	LT	600	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	464	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium	LT	44	UGG		
								7440-41-7	Beryllium	LT	.25	UGG		
								7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium	LT	23.1	UGG		
								7440-48-4	Cobalt	LT	15.7	UGG		
								7440-50-8	Copper	LT	22.4	UGG		
								7440-62-2	Vanadium	LT	41.5	UGG		
								7440-66-6	Zinc	LT	422	UGG		
								7440-70-2	Calcium	LT	3850	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								1024-57-3	Heptachlor epoxide	LT	3.90 E -3	UGG		
								1031-07-8	Endosulfan sulfate	LT	1.30 E -2	UGG		
								1104-28-2	PCB 1221	ND	8.00 E -2	UGG	T	
								11096-82-5	PCB 1260	ND	4.00 E -2	UGG	T	
								11097-69-1	PCB 1254	ND	.21	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SD	S5SD1	0.5	09-FEB-92	PC	44121	LH19/	11141-16-5	PCB 1232	ND	4.00 E -2	UGG	T	
								12672-29-6	PCB 1248	ND	4.00 E -2	UGG	T	
								12674-11-2	PCB 1016	ND	4.00 E -2	UGG	T	
								309-00-2	Aldrin	LT	1.30 E -2	UGG		
								319-84-6	alpha-Hexachlorocyclohexane / alpha-Benzene hexachloride	LT	2.50 E -3	UGG		
								319-85-7	beta-Hexachlorocyclohexane / beta-Benzene hexachloride	LT	5.40 E -3	UGG		
								319-86-8	delta-Hexachlorocyclohexane / delta-Benzene hexachloride	LT	2.28 E -2	UGG		
								33213-65-9	Endosulfan II / beta-Endosulfan	LT	7.10 E -3	UGG		
								50-29-3	2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane	LT	9.60 E -3	UGG		
								5103-71-9	alpha-Chlordane	LT	4.00 E -3	UGG		
								53469-21-9	PCB 1242	ND	4.00 E -2	UGG	T	
								53494-70-5	Endrin ketone	LT	6.10 E -3	UGG		
								5566-34-7	gamma-Chlordane	LT	2.14 E -2	UGG		
								58-89-9	Lindane / gamma-Benzene hexachloride / gamma-Hexachlorocyclopentadiene	LT	2.00 E -2	UGG		
								60-57-1	Dieldrin	LT	7.80 E -3	UGG		
								72-20-8	Endrin	LT	1.11 E -2	UGG		
								72-43-5	Methoxychlor / Methoxy-DDT / 1,1'-(2,2,2-Trichloroethylidene)bis(4-chlorophenyl)ethane / Rhoth*	LT	.211	UGG		
								72-54-8	ppDDD / 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane / Rhoth*	LT	1.12 E -2	UGG		
								72-55-9	2,2-Bis(p-chlorophenyl)-1,1-dichloroethene	LT	1.42 E -2	UGG		
								7421-93-4	Endrin aldehyde	LT	2.76 E -2	UGG		
								76-44-8	Heptachlor / 1H-1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-2H-pyran-2-one / Chlorinated camphene / Toxaphene	LT	9.60 E -3	UGG		
								8001-35-2	Camphchlor / Alltox / *	ND	.2	UGG	T	
								959-98-8	Endosulfan I / alpha-Endosulfan	LT	4.70 E -3	UGG		
								100-01-6	4-Nitroaniline	ND	1.7	UGG	R	
								100-02-7	4-Nitrophenol	LT	2.5	UGG		
								100-51-6	Benzyl alcohol	LT	.17	UGG		
								105-67-9	2,4-Dimethylphenol	LT	.33	UGG		
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.18	UGG		
								106-46-7	1,4-Dichlorobenzene	LT	.17	UGG		
								106-47-8	4-Chloroaniline	ND	.33	UGG	R	
								108-60-1	Bis(2-chloroisopropyl) ether	LT	.17	UGG		
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenyl acid / Phe*	LT	.17	UGG		
								111-44-4	Bis(2-chloroethyl) ether	LT	1.6	UGG		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SD	S5SD1	0.5	09-FEB-92	44121	PC	LM30/	111-91-1	Bis(2-chloroethoxy) methane	LT	.17	UGG		
								117-81-7	Bis(2-ethylhexyl) phthalate	LT	.19	UGG		
								117-84-0	Di-n-octyl phthalate	LT	.22	UGG		
								118-74-1	Hexachlorobenzene	LT	.26	UGG		
								120-12-7	Anthracene	LT	.17	UGG		
								120-82-1	1,2,4-Trichlorobenzene	LT	.29	UGG		
								120-83-2	2,4-Dichlorophenol	LT	.28	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.31	UGG		
								129-00-0	Benzo[def]phenanthrene / Pyrene	LT	.97	UGG		
								131-11-3	Dimethyl phthalate	LT	.17	UGG		
								132-64-9	Dibenzofuran	LT	.17	UGG		
								191-24-2	Benzo[ghi]perylene	LT	.25	UGG		
								193-39-5	Indeno[1,2,3-C,D]pyrene	LT	.17	UGG		
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	.73	UGG		
								206-44-0	Fluoranthene		.88	UGG		
								207-08-9	Benzo[k]fluoranthene	LT	.4	UGG		
								208-96-8	Acenaphthylene	LT	.27	UGG		
								218-01-9	Chrysene		.71	UGG		
								50-32-8	Benzo[a]pyrene		.58	UGG		
								51-28-5	2,4-Dinitrophenol	ND	1.7	UGG		
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	.27	UGG		
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	.84	UGG		
								541-73-1	1,3-Dichlorobenzene	LT	.58	UGG		
								56-55-3	Benzo[a]anthracene		.51	UGG		
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	.23	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.2	UGG		
								621-64-7	N-Nitrosodi-n-propylamine	LT	1.1	UGG		
								65-85-0	Benzoic acid	LT	.92	UGG		
								67-72-1	Hexachloroethane	LT	.17	UGG		
								77-47-4	Hexachlorocyclopentadiene	LT	1.8	UGG		
								78-59-1	Isophorone	LT	.32	UGG		
								83-32-9	Acenaphthene	LT	.27	UGG		
								84-66-2	Diethyl phthalate	LT	.35	UGG		
								84-74-2	Di-n-butyl phthalate	LT	.51	UGG		
								85-01-8	Phenanthrene	LT	.17	UGG		
								85-68-7	Butylbenzyl phthalate	LT	.2	UGG		
								86-30-6	N-Nitrosodiphenylamine	LT	.17	UGG		
								86-73-7	Fluorene / 9H-Fluorene	LT	.17	UGG		
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	.28	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SD	S5SD1	0.5	09-FEB-92	PC	44121	LM30/	87-86-5	Pentachlorophenol	LT	.48	UGG		
								88-06-2	2,4,6-Trichlorophenol	LT	.3	UGG		
								88-74-4	2-Nitroaniline	LT	.36	UGG		
								88-75-5	2-Nitrophenol	LT	.26	UGG		
								91-20-3	Naphthalene / Tar camphor	LT	.17	UGG		
								91-57-6	2-Methylnaphthalene	LT	.17	UGG		
								91-58-7	2-Chloronaphthalene	LT	.33	UGG		
								91-94-1	3,3'-Dichlorobenzidine	LT	.66	UGG		
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	.17	UGG	R	
								95-50-1	1,2-Dichlorobenzene	LT	.32	UGG		
								95-57-8	2-Chlorophenol	LT	.17	UGG		
								95-95-4	2,4,5-Trichlorophenol	LT	.24	UGG		
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.19	UGG		
								99-09-2	3-Nitroaniline	ND	1.7	UGG	R	
									4-Bromophenyl phenyl ether	LT	.17	UGG		
									4-Chlorophenyl phenyl ether	LT	.2	UGG		
									Unknown compound 531		.344	UGG	B	
									Unknown compound 536		.515	UGG	S	
									Unknown compound 540		.687	UGG	S	
									Unknown compound 546		1.031	UGG	S	
									Unknown compound 583		.344	UGG	S	
									Unknown compound 586		1.203	UGG	S	
									Unknown compound 591		.172	UGG	S	
									Unknown compound 593		.687	UGG	S	
									Unknown compound 594		.344	UGG	S	
									Unknown compound 596		2.062	UGG	D	
									Unknown compound 597		.344	UGG	S	
									Unknown compound 598		.344	UGG	S	
									Unknown compound 602		.687	UGG	S	
									Unknown compound 603		.515	UGG	S	
									Unknown compound 604		.344	UGG	S	
									Unknown compound 605		.515	UGG	S	
									Unknown compound 606		.515	UGG	S	
									Unknown compound 608		.859	UGG	S	
									Unknown compound 609		.687	UGG	S	
									Unknown compound 610		1.718	UGG	S	
									Unknown compound 612		3.436	UGG	S	
									Unknown compound 615		.344	UGG	S	
									Unknown compound 616		.515	UGG	S	
									Unknown compound 618		.515	UGG	S	
									Unknown compound 618		.859	UGG	S	
									Unknown compound 618		.515	UGG	D	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SD	S5SD1	0.5	09-FEB-92	PC	44121	LM30/		Unknown compound 620		.172	UGG	S	
									Unknown compound 624		.515	UGG	D	
									Unknown compound 629		.687	UGG	S	
									Unknown compound 632		.344	UGG	S	
									Unknown compound 644		.515	UGG	S	
									Unknown compound 648		1.203	UGG	S	
									Unknown compound 651		.344	UGG	S	
									Unknown compound 670		.344	UGG	S	
									Unknown compound 689		.172	UGG	S	
									Ethylbenzene	LT	.344	UGG	S	
									Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	LT	2.5 E -3	UGG		
									cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	LT	2.5 E -3	UGG		
									1,2-Dichloroethane	LT	3.0 E -3	UGG		
									Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	LT	2.7 E -3	UGG		
									Toluene	LT	1.9 E -2	UGG		
									Chlorobenzene / Monochlorobenzene	LT	2.5 E -3	UGG		
									Dibromochloromethane / Chlorodibromomethane	LT	5.7 E -2	UGG		
									Tetrachloroethylene / Perchloroethylen*	LT	2.5 E -3	UGG		
									cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	LT	2.5 E -3	UGG		
									trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	LT	2.5 E -3	UGG		
									Carbon tetrachloride	LT	3.1 E -3	UGG		
									Methyl n-butyl ketone / 2-Hexanone	LT	1.8 E -2	UGG		
									Acetone	LT	.14	UGG		
									Chloroform	LT	2.6 E -3	UGG		
									Benzene	LT	2.5 E -3	UGG		
									1,1,1-Trichloroethane	LT	2.5 E -3	UGG		
									Bromomethane	LT	3.1 E -3	UGG		
									Chloromethane	LT	3.5 E -2	UGG		
									Chloroethane	LT	3.0 E -3	UGG		
									Vinyl chloride / Chloroethene	LT	3.8 E -3	UGG		
									Methylene chloride / Dichloromethane	LT	6.2 E -3	UGG		
									Carbon disulfide	LT	1.4 E -2	UGG		
									Bromoform	LT	2.5 E -3	UGG		
									Bromodichloromethane	LT	2.5 E -3	UGG		
									1,1-Dichloroethane	LT	2.5 E -3	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SD	S5SD1	0.5	09-FEB-92	PC 44121		LM33/	75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	LT	3.2 E -2	UGG		
								75-69-4	Trichlorofluoromethane	ND	5.0 E -3	UGG	R	
								78-87-5	1,2-Dichloropropane	LT	2.5 E -3	UGG		
								78-93-3	Methyl ethyl ketone / 2-Butanone		2.5 E -2	UGG		
								79-00-5	1,1,2-Trichloroethane	LT	2.5 E -3	UGG		
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	LT	2.5 E -3	UGG		
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene * Xylenes, total combined	LT	1.2 E -2	UGG		
									trans-1,3-Dichloropropene	LT	7.5 E -3	UGG		
									Nitrite, nitrate - nonspecific	LT	2.5 E -3	UGG		
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	ND	1	UGG	T	
										LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
									Nitrite, nitrate - nonspecific	ND	1	UGG	T	
								14797-55-8	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5						

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CSE
Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
STRM	S10SD1	S10SD1	0.5	03-FEB-92	PC 37540		JS14/S	7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		34.3	UGG		
								7440-48-4	Cobalt		17.1	UGG		
								7440-50-8	Copper		7.6	UGG		
								7440-62-2	Vanadium		74.8	UGG		
								7440-66-6	Zinc		32.4	UGG		
								7440-70-2	Calcium		230	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
S10SD2	S10SD2		0.5	03-FEB-92	PC 37567		99 /S	14797-55-8	Nitrite, nitrate - nonspecific	LT	2.07	UGG		
							JB06/	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							JS14/S	7429-90-5	Aluminum		3760	UGG		
								7439-89-6	Iron		6300	UGG		
								7439-92-1	Lead	LT	10	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		580	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	7.5	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-36-0	Antimony	LT	82.9	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG		
								7440-39-3	Barium	ND	45	UGG		
								7440-41-7	Beryllium		.421	UGG		

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quats
STRM	S10SD2	S10SD2	0.5	03-FEB-92	PC 37567	JS14/S	7440-43-9	Cadmium	LT	.427	UGG		
							7440-47-3	Chromium		6.12	UGG		
							7440-48-4	Cobalt		5.84	UGG		
							7440-50-8	Copper	LT	3.38	UGG		
							7440-62-2	Vanadium		13.5	UGG		
							7440-66-6	Zinc		41.3	UGG		
							7440-70-2	Calcium		663	UGG		
							7782-49-2	Selenium	LT	12.4	UGG		
							57-12-5	Cyanide	LT	1.22	UGG		
							118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
							121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
							121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
							2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
							479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
							55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
							606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
							78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
							88-72-2	2-Nitrotoluene	LT	.505	UGG		
							99-08-1	3-Nitrotoluene	LT	.251	UGG		
							99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
							99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
							99-99-0	4-Nitrotoluene	LT	.245	UGG		
S11SD1	S11SD1	S11SD1	0.5	04-FEB-92	PC 37478	99 /S JB06/ JC02/S JS14/S	14797-55-8	Nitrite, nitrate - nonspecific	ND	1	UGG	T	
							7439-97-6	Mercury	LT	8.70 E -2	UGG		
							7440-22-4	Silver	LT	1.01	UGG		
							7429-90-5	Aluminum		3550	UGG		
							7439-89-6	Iron		15000	UGG		
							7439-92-1	Lead		16.3	UGG		
							7439-95-4	Magnesium	LT	138	UGG		
							7439-96-5	Manganese		1400	UGG		
							7439-98-7	Molybdenum	LT	4	UGG		
							7440-02-0	Nickel	LT	7.5	UGG		
							7440-09-7	Potassium	LT	142	UGG		
							7440-23-5	Sodium	LT	50	UGG		
							7440-28-0	Thallium	LT	12.5	UGG		
							7440-36-0	Antimony	LT	82.9	UGG		
							7440-38-2	Arsenic	ND	12.7	UGG	T	
							7440-39-3	Barium		21.2	UGG		
							7440-41-7	Beryllium		.682	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
STRM	S11SD1	S11SD1	0.5	04-FEB-92	PC	37478		JS14/S	7440-43-9	Cadmium	LT	.427	UGG		
									7440-47-3	Chromium		12.8	UGG		
									7440-48-4	Cobalt		21.8	UGG		
									7440-50-8	Copper		4.49	UGG		
									7440-62-2	Vanadium		30.4	UGG		
									7440-66-6	Zinc		19.8	UGG		
									7440-70-2	Calcium		121	UGG		
									7782-49-2	Selenium	LT	12.4	UGG	1	
								KY04/	57-12-5	Cyanide	LT	1.22	UGG		
								LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
									121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
									121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
									2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
									479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
									55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
									606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
									78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
									88-72-2	2-Nitrotoluene	LT	.505	UGG		
									99-08-1	3-Nitrotoluene	LT	.251	UGG		
									99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
									99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
									99-99-0	4-Nitrotoluene	LT	.245	UGG		
S11SD2	S11SD2	S11SD2	0.5	04-FEB-92	PC	37699		00 / S	14797-55-8	Total organic carbon	ND	9230	UGG		
								99 /	57-12-5	Nitrite, nitrate - nonspecific	ND	7	UGG	T	
									7440-36-0	Cyanide	LT	1.22	UGG		
									7439-97-6	Antimony	ND	82.9	UGG	T	
									7429-90-5	Mercury	LT	8.70 E -2	UGG		
									7439-89-6	Aluminum		5060	UGG		
									7439-92-1	Iron		17000	UGG		
									7439-95-4	Lead		24.8	UGG		
									7439-96-5	Magnesium	LT	138	UGG		
									7439-98-7	Manganese		195	UGG		
									7440-02-0	Molybdenum	LT	4	UGG		
									7440-09-7	Nickel	LT	7.5	UGG		
									7440-23-5	Potassium	LT	142	UGG		
									7440-28-0	Sodium	LT	50	UGG		
									7440-38-2	Thallium	LT	12.5	UGG		
									7440-39-3	Arsenic	ND	12.7	UGG	T	
										Barium		26.5	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly.	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quats
STRM	S11SD2	S11SD2	0.5	04-FEB-92	PC	37699	JS14/S	7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7440-62-2 7440-66-6 7440-70-2 7782-49-2	Beryllium Cadmium Chromium Cobalt Copper Vanadium Zinc Calcium Selenium	LT	.456 .427 17.4 11.1 15 31.3 39.9 343 12.4	UGG UGG UGG UGG UGG UGG UGG UGG UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
							121-14-2 121-82-4		2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.251 .51	UGG UGG		K K
							2691-41-0 479-45-8		Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	.499 1.27	UGG UGG		K K
							55-63-0		Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
							606-20-2 78-11-5		2,6-Dinitrotoluene PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT LT	.5 2.5	UGG UGG		K K
							88-72-2 99-08-1 99-35-4 99-65-0 99-99-0		2-Nitrotoluene 3-Nitrotoluene 1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 4-Nitrotoluene	LT LT LT LT LT	.505 .251 .25 .249 .245	UGG UGG UGG UGG UGG		K K K K K
							57-12-5		Cyanide	LT	1.22	UGG		L
							99 / 37699D 99 / 37702		Nitrite, nitrate - nonspecific Antimony	ND ND	1 82.9	UGG UGG	T T	
							99 / J806/ JC02/S KY04/ LW32/S	14797-55-8 7440-36-0 7439-97-6 7440-22-4 57-12-5 118-96-7	Mercury Silver Cyanide 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT LT LT LT	8.70 E -2 1.01 1.22 .25	UGG UGG UGG UGG		K K K K
							121-14-2 121-82-4		2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.251 .51	UGG UGG		K K
							2691-41-0 479-45-8		Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	.499 1.27	UGG UGG		K K
							55-63-0		Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
							606-20-2		2,6-Dinitrotoluene	LT	.5	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
STRM	S11SD2	S11SDR	0.5	04-FEB-92	37702	PC		LW32/S	78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me* 2-Nitrotoluene	LT	2.5	UGG		K
									88-72-2	3-Nitrotoluene	LT	.505	UGG		K
									99-08-1	1,3,5-Trinitrobenzene	LT	.251	UGG		K
									99-35-4	1,3-Dinitrobenzene	LT	.25	UGG		K
									99-65-0	4-Nitrotoluene	LT	.249	UGG		K
									99-99-0	Aluminum	LT	.245	UGG		K
	S11SDR	S11SDR	0.5	04-FEB-92	37702	PC		JS14/S	7429-90-5	Iron		5900	UGG		K
									7439-89-6	Lead		96000	UGG		K
									7439-92-1	Magnesium	LT	30.3	UGG		K
									7439-95-4	Manganese	LT	138	UGG		K
									7439-96-5	Molybdenum	LT	1000	UGG		K
									7439-98-7	Nickel	LT	4	UGG		K
									7440-02-0	Potassium	LT	12.5	UGG		K
									7440-09-7	Sodium	LT	142	UGG		K
									7440-23-5	Thallium	LT	50	UGG		K
									7440-28-0	Arsenic	ND	12.5	UGG		K
									7440-38-2	Beryllium		16.1	UGG		K
									7440-39-3	Cadmium	LT	1.18	UGG		K
									7440-41-7	Chromium		.427	UGG		K
									7440-43-9	Cobalt		55.4	UGG		K
									7440-47-3	Copper		35.2	UGG		K
									7440-48-4	Vanadium		8.13	UGG		K
									7440-50-8	Zinc		88.4	UGG		K
									7440-62-2	Calcium		49.3	UGG		K
									7440-66-6	Selenium	LT	144	UGG		K
									7440-70-2	Total petroleum hydrocarbons		12.4	UGG		K
S17SD3	S17SD3	S17SD3	0.5	01-FEB-92	36625	PC		00 /S	7782-49-2	Antimony	ND	36.3	UGG		K
								99 /	7440-36-0	Mercury	LT	82.9	UGG		K
								JB06/S	7439-97-6	Silver	LT	8.70 E -2	UGG		K
								JC02/S	7440-22-4	Aluminum	LT	1.01	UGG		K
								JS14/S	7429-90-5	Iron		1560	UGG		K
									7439-89-6	Lead		30000	UGG		K
									7439-92-1	Magnesium		20.4	UGG		K
									7439-95-4	Manganese	LT	138	UGG		K
									7439-96-5	Molybdenum	LT	290	UGG		K
									7439-98-7	Nickel	LT	4	UGG		K
									7440-02-0	Potassium	LT	11	UGG		K
									7440-09-7	Sodium	LT	142	UGG		K
									7440-23-5	Thallium	LT	50	UGG		K
									7440-28-0	Arsenic	LT	12.5	UGG		K
									7440-38-2	Barium	ND	12.7	UGG		K
									7440-39-3			37.5	UGG		K

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly.	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
STRM	S17SD3	S17SD3	0.5	01-FEB-92	PC	36625	JS14/S	7440-41-7	Beryllium		.538	UGG		
								7440-43-9	Cadmium		.899	UGG		
								7440-47-3	Chromium		22.8	UGG		
								7440-48-4	Cobalt		20.4	UGG		
								7440-50-8	Copper		97.6	UGG		
								7440-62-2	Vanadium		31.4	UGG		
								7440-66-6	Zinc		105	UGG		
								7440-70-2	Calcium	LT	109	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
								57-12-5	Cyanide	LT	1.22	UGG		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
S17SD4	S17SD4		0.5	01-FEB-92	PC	36633	00 / S		Total petroleum hydrocarbons		110	UGG		
							99 /	7440-36-0	Antimony	ND	82.9	UGG	T	
							J806/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							JS14/S	7429-90-5	Aluminum		3220	UGG		
								7439-89-6	Iron		26000	UGG		
								7439-92-1	Lead		19.4	UGG		
								7439-95-4	Magnesium	LT	138	UGG		
								7439-96-5	Manganese		450	UGG		
								7439-98-7	Molybdenum	LT	4	UGG		
								7440-02-0	Nickel	LT	16	UGG		
								7440-09-7	Potassium	LT	142	UGG		
								7440-23-5	Sodium	LT	50	UGG		
								7440-28-0	Thallium	LT	12.5	UGG		
								7440-38-2	Arsenic	ND	12.7	UGG	T	
								7440-39-3	Barium		21.6	UGG		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
STRM	S17SD4	S17SD4	0.5	01-FEB-92	PC	36633	JS14/S	7440-41-7	Beryllium	LT	.688	UGG		
								7440-43-9	Cadmium		.427	UGG		
								7440-47-3	Chromium		28.9	UGG		
								7440-48-4	Cobalt		13	UGG		
								7440-50-8	Copper		11.6	UGG		
								7440-62-2	Vanadium		38.3	UGG		
								7440-66-6	Zinc		57.8	UGG		
								7440-70-2	Calcium		158	UGG		
								7782-49-2	Selenium		12.4	UGG		
							KY04/	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	2.5	UGG		
								88-72-2	2-Nitrotoluene	LT	.505	UGG		
								99-08-1	3-Nitrotoluene	LT	.251	UGG		
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		
								99-99-0	4-Nitrotoluene	LT	.245	UGG		
S26SD1	S26SD1	S26SD1	0.5	02-FEB-92	PC	36919	99 /	7440-36-0	Antimony	ND	82.9	UGG		
							JB06/S	7439-97-6	Mercury	LT	8.70 E -2	UGG		
							JC02/S	7440-22-4	Silver	LT	1.01	UGG		
							JS14/S	7429-90-5	Aluminum		22000	UGG		
								7439-89-6	Iron		28000	UGG		
								7439-92-1	Lead		45.1	UGG		
								7439-95-4	Magnesium		1190	UGG		
								7439-96-5	Manganese		1200	UGG		
								7439-98-7	Molybdenum		4	UGG		
								7440-02-0	Nickel	LT	17.2	UGG		
								7440-09-7	Potassium		766	UGG		
								7440-23-5	Sodium		70.9	UGG		
								7440-28-0	Thallium		12.5	UGG		
								7440-38-2	Arsenic	LT	12.7	UGG		
								7440-39-3	Barium	ND	63.3	UGG		
								7440-41-7	Beryllium		.816	UGG		

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

11:06:48

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CSE
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
STRM	S26SD1	S26SD1	0.5	02-FEB-92	PC	36919	JS14/S	7440-43-9	Cadmium	LT	.427	UGG		
								7440-47-3	Chromium		30.7	UGG		
								7440-48-4	Cobalt		31	UGG		
								7440-50-8	Copper		15.3	UGG		
								7440-62-2	Vanadium		61	UGG		
								7440-66-6	Zinc		46.5	UGG		
								7440-70-2	Calcium		795	UGG		
								7782-49-2	Selenium	LT	12.4	UGG		
							KY04/S	57-12-5	Cyanide	LT	1.22	UGG		
							LW32/S	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.25	UGG		K
								121-14-2	2,4-Dinitrotoluene	LT	.251	UGG		K
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.51	UGG		K
								2691-41-0	Cyclotetramethylenetetranitramine	LT	.499	UGG		K
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.27	UGG		K
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	2.5	UGG		K
								606-20-2	2,6-Dinitrotoluene	LT	.5	UGG		K
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	2.5	UGG		K
								88-72-2	2-Nitrotoluene	LT	.505	UGG		K
								99-08-1	3-Nitrotoluene	LT	.251	UGG		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.25	UGG		K
								99-65-0	1,3-Dinitrobenzene	LT	.249	UGG		K
								99-99-0	4-Nitrotoluene	LT	.245	UGG		K

** End of Report - 748 Records Found **

* - Analyte Description has been truncated. See Data Dictionary

Appendix I
Surface Water Data

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SW1	S5SW	0.0	09-FEB-92	PC	44105	UM06/	100-01-6	4-Nitroaniline	ND	50	UGL	R	----
								100-02-7	4-Nitrophenol	ND	50	UGL	R	----
								100-51-6	Benzyl alcohol	ND	10	UGL	R	----
								105-67-9	2,4-Dimethylphenol	ND	10	UGL	R	----
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	----
								106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	----
								106-47-8	4-Chloroaniline	ND	10	UGL	R	----
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	----
								108-95-2	Phenol / Carbolic acid / Phenic acid / Phenyllic acid / Phe*	ND	10	UGL	R	----
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	----
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	----
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	----
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	----
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	----
								120-12-7	Anthracene	ND	10	UGL	R	----
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	----
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	----
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	----
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	----
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	----
								132-64-9	Dibenzofuran	ND	10	UGL	R	----
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	----
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	----
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	----
								206-44-0	Fluoranthene	ND	10	UGL	R	----
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	----
								208-96-8	Acenaphthylene	ND	10	UGL	R	----
								218-01-9	Chrysene	ND	10	UGL	R	----
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	----
								51-28-5	2,4-Dinitrophenol	ND	10	UGL	R	----
								53-70-3	Dibenz[a,h]anthracene / 1,2:5,6-Dibenzanthracene	ND	50	UGL	R	----
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	----
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	----
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	----
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	----
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	----
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	----
								65-85-0	Benzoic acid	ND	50	UGL	R	----
								67-72-1	Hexachloroethane	ND	10	UGL	R	----

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

11:09:13

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quils
SKHL	S5SW1	S5SW	0.0	09-FEB-92	PC 44105	UM06/	77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
							78-59-1	Isophorone	ND	10	UGL	R	
							83-32-9	Acenaphthene	ND	10	UGL	R	
							84-66-2	Diethyl phthalate	ND	10	UGL	R	
							84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
							85-01-8	Phenanthrene	ND	10	UGL	R	
							85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
							86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
							86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
							87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
							87-86-5	Pentachlorophenol	ND	50	UGL	R	
							88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
							88-74-4	2-Nitroaniline	ND	50	UGL	R	
							88-75-5	2-Nitrophenol	ND	10	UGL	R	
							91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
							91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
							91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
							91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
							95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
							95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
							95-57-8	2-Chlorophenol	ND	10	UGL	R	
							95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
							98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
							99-09-2	3-Nitroaniline	ND	50	UGL	R	
								4-Bromophenyl phenyl ether	ND	10	UGL	R	
								4-Chlorophenyl phenyl ether	ND	10	UGL	R	
								Ethylbenzene	ND	5	UGL	R	
								Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL	R	
								cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								1,2-Dichloroethane	ND	5	UGL	R	
								Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								Toluene	ND	5	UGL	R	
								Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								Tetrachloroethylene / Perchloroethylen*	ND	5	UGL	R	
								cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SW1	S5SW1	0.0	09-FEB-92	PC 44105	99	/	156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	5	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	10	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	5	UGL	R	
									Mercury	LT	.74	UGL		
									Lead	LT	1.26	UGL		
									Thallium	LT	2.5	UGL		
									Arsenic	LT	6.01	UGL		
									Selenium	LT	14.9	UGL		
									Aluminum	LT	111	UGL		
									Iron	LT	481	UGL		
									Lead	LT	100	UGL		
									Magnesium	LT	12200	UGL		
									Manganese	LT	1010	UGL		
									Molybdenum	LT	30.9	UGL		
									Nickel	LT	63.1	UGL		
									Potassium	LT	20200	UGL		
									Silver	LT	12.5	UGL		
									Sodium	LT	2810	UGL		

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

11:09:13

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SW1	S5SW1	0.0	09-FEB-92	PC 44105		SS15/	7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium		188	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium	LT	15	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper	LT	20	UGL		
								7440-62-2	Vanadium	LT	20	UGL		
								7440-66-6	Zinc		450	UGL		
								7440-70-2	Calcium		1.3 E 5	UGL		
								7782-49-2	Selenium	LT	75	UGL		
							TY03/	57-12-5	Cyanide	LT	8.17	UGL		
							UH21/	1024-57-3	Heptachlor epoxide	LT	6.00 E -3	UGL		
								1031-07-8	Endosulfan sulfate	LT	2.00 E -2	UGL		
								1104-28-2	PCB 1221	ND	.2	UGL	R	
								11096-82-5	PCB 1260	ND	.1	UGL	R	
								11097-69-1	PCB 1254	ND	.1	UGL	R	
								11141-16-5	PCB 1232	ND	.1	UGL	R	
								12672-29-6	PCB 1248	ND	.1	UGL	R	
								12674-11-2	PCB 1016	ND	.1	UGL	R	
								309-00-2	Aldrin	LT	6.38 E -2	UGL		
								319-84-6	alpha-Hexachlorocyclohexane / alpha-Benzene hexachloride	LT	4.34 E -2	UGL		
								319-85-7	beta-Hexachlorocyclohexane / beta-Benzene hexachloride	LT	1.09 E -2	UGL		
								319-86-8	delta-Hexachlorocyclohexane / delta-Benzene hexachloride	LT	4.88 E -2	UGL		
								33213-65-9	Endosulfan II / beta-Endosulfan	LT	1.20 E -2	UGL		
								50-29-3	2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane	LT	3.16 E -2	UGL		
								5103-71-9	alpha-Chlordane	LT	2.02 E -2	UGL		
								53469-21-9	PCB 1242	ND	.1	UGL	R	
								53494-70-5	Endrin ketone	LT	2.82 E -2	UGL		
								5566-34-7	gamma-Chlordane	LT	4.50 E -2	UGL		
								58-89-9	Lindane / gamma-Benzene hexachloride / gamma-Hexachlorocyclopentadiene	LT	4.29 E -2	UGL		
								60-57-1	Dieldrin	LT	3.21 E -2	UGL		
								72-20-8	Endrin	LT	3.72 E -2	UGL		
								72-43-5	Methoxychlor / Methoxy-DDT / 1,1'-Methoxy-2,2-bis(4-chlorophenyl)ethane	LT	.267	UGL		
								72-54-8	(2,2,2-Trichloroethylidene)bis(4-chlorophenyl)ethane	LT	8.48 E -2	UGL		
								72-55-9	ppDDD / 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane / Rhoth*	LT		UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CSW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
SKHL	S5SW1	S5SW1	0.0	09-FEB-92	PC 44105		UH21/	72-55-9	2,2-Bis(p-chlorophenyl)-1,1-dichloroethene	LT	9.46 E -2	UGL		
								7421-93-4	Endrin aldehyde	LT	6.97 E -2	UGL		
								76-44-8	Heptachlor / 1H-1,4,5,6,7,8-Heptachloro-3a,4,7,7a-tetrahydro-2H-pyran-2-one	LT	6.31 E -2	UGL		
								8001-35-2	Toxaphene / Chlorinated camphene / Camphchlor / Alltox / *	ND	.5	UGL	R	
								959-98-8	Endosulfan I / alpha-Endosulfan	LT	8.56 E -3	UGL		
							UW35/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
STRM	NBSW1	NBSW1	0.0	05-FEB-92	PC 38873		TF13/ UW35/	14797-55-8	Nitrite, nitrate - nonspecific	LT	92.6	UGL		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)

File Type: CSW

Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
STRM	NBSW1	NBSW1	0.0	05-FEB-92	PC 38873		UW35/	99-99-0	4-Nitrotoluene	LT	.338	UGL		
	NBSW2	NBSW2	0.0	05-FEB-92	PC 38881		TF13/ UW35/	14797-55-8 118-96-7	Nitrite, nitrate - nonspecific 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT LT	10 .319	UGL UGL		
								121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.321 .653	UGL UGL		
								2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	2.29 1.29	UGL UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT LT	.64 5.02	UGL UGL		
								88-72-2 99-08-1	2-Nitrotoluene 3-Nitrotoluene	LT LT	.646 .492	UGL UGL		
								99-35-4 99-65-0	1,3,5-Trinitrobenzene 1,3-Dinitrobenzene	LT LT	.517 .319	UGL UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
	NBSW3	NBSW3	0.0	06-FEB-92	PC 40827		TF13/ UW35/	14797-55-8 118-96-7	Nitrite, nitrate - nonspecific 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	86.6 .319	UGL UGL		
								121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.321 .653	UGL UGL		
								2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	2.29 1.29	UGL UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT LT	.64 5.02	UGL UGL		
								88-72-2 99-08-1	2-Nitrotoluene 3-Nitrotoluene	LT LT	.646 .492	UGL UGL		
								99-35-4 99-65-0	1,3,5-Trinitrobenzene 1,3-Dinitrobenzene	LT LT	.517 .319	UGL UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		

** End of Report - 211 Records Found **

* - Analyte Description has been truncated. See Data Dictionary

**Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)**

File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B11	91B11	23.0	27-MAR-92	PC	94978	99 / SB07/ SD08/	14797-55-8	Nitrite, nitrate - nonspecific		320	UGL		
								7439-97-6	Mercury	LT	.74	UGL		
								7439-92-1	Lead		15.4	UGL		
								7440-28-0	Thallium		2.5	UGL		
								7440-38-2	Arsenic		6.01	UGL		
								7782-49-2	Selenium		14.9	UGL		
								7429-90-5	Aluminum		31600	UGL		
								7439-89-6	Iron		49000	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium		1190	UGL		
								7439-96-5	Manganese		136	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium		6780	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		38400	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium	LT	70.6	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
91B11C	91B11	91B11	23.0	27-MAR-92	PC	894978	TY03/ SD08/ TY03/ UW35/W	7440-43-9	Cadmium		5	UGL		
								7440-47-3	Chromium		48.8	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper		45.2	UGL		
								7440-62-2	Vanadium		109	UGL		
								7440-66-6	Zinc		970	UGL		
								7440-70-2	Calcium		27500	UGL		
								7782-49-2	Selenium	LT	75	UGL		
								57-12-5	Cyanide	LT	8.17	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL	D	
								57-12-5	Cyanide	LT	8.17	UGL	D	
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene		.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	4.56	UGL	C	
								2691-41-0	Cyclotetramethylenetetranitramine		2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene		.64	UGL		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	5.02	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Appendix J
Groundwater Data

24-OCT-94

15:23:00

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Code	Data Quals
WELL	91B11C	91B11	23.0	27-MAR-92	PC	B94978	UW35/W	88-72-2	2-Nitrotoluene	LT	.646	UGL		K
								99-08-1	3-Nitrotoluene	LT	.492	UGL		K
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		K
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		K
								99-99-0	4-Nitrotoluene	LT	.338	UGL		K
								7439-97-6	Mercury	LT	.74	UGL		
91B12		91B12	45.0	11-MAR-92	PC	74748	SB07/ SD08/	7439-92-1	Lead	LT	6.47	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
								7429-90-5	Aluminum	LT	26400	UGL		
								7439-89-6	Iron	LT	62000	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium	LT	2080	UGL		
								7439-96-5	Manganese	LT	687	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium	LT	2920	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium	LT	9910	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium	LT	36.3	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium	LT	113	UGL		
								7440-48-4	Cobalt	LT	50.7	UGL		
								7440-50-8	Copper	LT	38.2	UGL		
								7440-62-2	Vanadium	LT	94	UGL		
								7440-66-6	Zinc	LT	604	UGL		
								7440-70-2	Calcium	LT	9460	UGL		
								7782-49-2	Selenium	LT	75	UGL		
								14797-55-8	Nitrite, nitrate - nonspecific	LT	11.1	UGL		
								57-12-5	Cyanide	LT	8.17	UGL		
								100-41-4	Ethylbenzene	ND	5	UGL		R
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL		R
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL		R
								107-06-2	1,2-Dichloroethane	ND	5	UGL		R
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL		R
								108-88-3	Toluene	ND	5	UGL		R
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL		R

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Unit Meas.	Flag Codes	Data Units
WELL	91B12	91B12	45.0	11-MAR-92	PC	74748	UM05/	124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	UGL	R	
								127-18-4	Tetrachloroethylene / Perchloroethylen*	ND	UGL	R	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	UGL	R	
								56-23-5	Carbon tetrachloride	ND	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	UGL	R	
								67-64-1	Acetone	ND	UGL	S	
								67-66-3	Chloroform	ND	UGL	R	
								71-43-2	Benzene	ND	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	UGL	R	
								74-83-9	Bromomethane	ND	UGL	R	
								74-87-3	Chloromethane	ND	UGL	R	
								75-00-3	Chloroethane	ND	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	UGL	R	
								75-15-0	Carbon disulfide	ND	UGL	R	
								75-25-2	Bromoform	ND	UGL	R	
								75-27-4	Bromodichloromethane	ND	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	UGL	R	
								79-01-6	Trichloroethylene /Trichloroethene / Ethinyl trichloride /T*	ND	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	UGL	R	
									Unknown compound 019		UGL	S	
									Xylenes, total combined	ND	UGL	R	
									trans-1,3-Dichloropropene	ND	UGL	R	
							UM06/	100-01-6	4-Nitroaniline	ND	UGL	R	
								100-02-7	4-Nitrophenol	ND	UGL	R	
								100-51-6	Benzyl alcohol	ND	UGL	R	
								105-67-9	2,4-Dimethylphenol	ND	UGL	R	
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	ND	UGL	R	
								106-46-7	1,4-Dichlorobenzene	ND	UGL	R	
								106-47-8	4-Chloroaniline	ND	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B12	91B12	45.0	11-MAR-92	PC	74748	UM06/	108-95-2	Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[a,h]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quant.
WELL	91B12	91B12	45.0	11-MAR-92	PC	74748	UM06/	86-73-7 87-68-3	Fluorene / 9H-Fluorene Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND ND	10 10	UGL UGL	R R	
								87-86-5 88-06-2 88-74-4 88-75-5 91-20-3 91-57-6 91-58-7 91-94-1 95-48-7 95-50-1 95-57-8 95-95-4 98-95-3	Pentachlorophenol 2,4,6-Trichlorophenol 2-Nitroaniline 2-Nitrophenol Naphthalene / Tar camphor 2-Methylnaphthalene 2-Chloronaphthalene 3,3'-Dichlorobenzidine o-Cresol / 2-Cresol / 2-Methylphenol 1,2-Dichlorobenzene 2-Chlorophenol 2,4,5-Trichlorophenol Nitrobenzene / Essence of mirbane / Oil of mirbane	ND ND ND ND ND ND ND ND ND ND ND ND ND	50 10 50 10 10 10 20 10 10 10 50 10	UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL	R R R R R R R R R R R R	
								99-09-2	3-Nitroaniline 4-Bromophenyl phenyl ether 4-Chlorophenyl phenyl ether 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	ND ND ND LT	50 10 10 .319	UGL UGL UGL UGL	R R R	
							UW35/	118-96-7 121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine * Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / * Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT LT LT LT	.321 .653 2.29 1.29	UGL UGL UGL UGL		
								55-63-0 606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me* 2-Nitrotoluene 3-Nitrotoluene	LT LT LT	.64 5.02 .646 .492	UGL UGL UGL UGL		
								88-72-2 99-08-1 99-35-4 99-65-0 99-99-0 7440-28-0 7782-49-2	1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 4-Nitrotoluene Thallium Selenium Unknown compound 019 Unknown compound 019 Total organic carbon Mercury	LT LT LT LT LT LT	.319 .338 2.5 14.9 7 8 3150 .74	UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL	D D S S	
	91B13	91B13	15.0	15-MAR-92	PC	77666	SD08/ UM05/ UM05/ 00 / SB07/	74748D 74748MS 74748SD 77666						

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quails
WELL	91B13	91B13	15.0	15-MAR-92	PC	77666	SD08/	7439-92-1	Lead	LT	1.7	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
							SS15/	7429-90-5	Aluminum		316	UGL		
								7439-89-6	Iron		632	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium		2910	UGL		
								7439-96-5	Manganese		705	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium	LT	1250	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		4100	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium	UGL	21.2	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium		22.4	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper	LT	20	UGL		
								7440-62-2	Vanadium	LT	20	UGL		
								7440-66-6	Zinc		522	UGL		
								7440-70-2	Calcium	LT	9290	UGL		
							TV03/	7782-49-2	Selenium	LT	75	UGL		
							UW35/	57-12-5	Cyanide	LT	8.17	UGL		
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)methyl]propane	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)

File Type: CGW 24-OCT-94
Sampling Date Range: 01-JAN-91

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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B13	91B13	15.0	15-MAR-92	77666	PC	UW35/	99-99-0	4-Nitrotoluene	LT	.338	UGL		
	91B14	91B14	8.0	24-MAR-92	89648	PC	99 / UM05/W	14797-55-8 100-41-4 100-42-5	Nitrite, nitrate - nonspecific Ethylbenzene Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	ND ND	1050 5	UGL UGL	R R	
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								107-06-2	1,2-Dichloroethane	ND	5	UGL	R	
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND	5	UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene / Tetrachloroethene / Perchloroethylen*	ND	5	UGL	R	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-34-5						

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Date Orig.
WELL	91B14	91B14	8.0	24-MAR-92	PC	89648	UM05/W	79-34-5	Tetrachloroethane / 1,1,2,2- Tetrachloroethane / Acetylene *	ND	5	UGL	R	
							UM06/	100-01-6	Xylenes, total combined	ND	5	UGL	R	
								100-02-7	trans-1,3-Dichloropropene	ND	5	UGL	R	
								100-51-6	4-Nitroaniline	ND	50	UGL	R	
								105-67-9	4-Nitrophenol	ND	50	UGL	R	
								106-44-5	Benzyl alcohol	ND	10	UGL	R	
								106-46-7	2,4-Dimethylphenol	ND	10	UGL	R	
								106-47-8	p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
								108-60-1	1,4-Dichlorobenzene	ND	10	UGL	R	
								108-95-2	4-Chloroaniline	ND	10	UGL	R	
								111-44-4	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								111-91-1	Phenol / Carboic acid / Phenic acid	ND	10	UGL	R	
								117-81-7	/ Phenylc acid / Phe*	ND	10	UGL	R	
								117-84-0	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								118-74-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								120-12-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								120-82-1	Di-n-octyl phthalate	ND	10	UGL	R	
								120-83-2	Hexachlorobenzene	ND	10	UGL	R	
								121-14-2	Anthracene	ND	10	UGL	R	
								129-00-0	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								131-11-3	2,4-Dichlorophenol	ND	10	UGL	R	
								132-64-9	2,4-Dinitrotoluene	ND	10	UGL	R	
								191-24-2	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								193-39-5	Dimethyl phthalate	ND	10	UGL	R	
								205-99-2	Dibenzofuran	ND	10	UGL	R	
								206-44-0	Benzo[ghi]perylene	ND	10	UGL	R	
								207-08-9	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								208-96-8	Benzo[b]fluoranthene / 3,4- Benzofluoranthene	ND	10	UGL	R	
								218-01-9	Fluoranthene	ND	10	UGL	R	
								50-32-8	Benzo[k]fluoranthene	ND	10	UGL	R	
								51-28-5	Acenaphthylene	ND	10	UGL	R	
								53-70-3	Chrysene	ND	10	UGL	R	
								534-52-1	Benzo[a]pyrene	ND	50	UGL	R	
								541-73-1	2,4-Dinitrophenol	ND	10	UGL	R	
								56-55-3	Dibenz[ah]anthracene / 1,2:5,6- dinitroanthracene	ND	10	UGL	R	
								59-50-7	4,6-Dinitro-2-cresol / 2-Methyl-4,6- dinitrophenol	ND	50	UGL	R	
									1,3-Dichlorobenzene	ND	10	UGL	R	
									Benzo[a]anthracene	ND	10	UGL	R	
									3-Methyl-4-chlorophenol / 4-Chloro-3- cresol / 4-Chloro-3-m*	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B14	91B14	8.0	24-MAR-92	PC 89648	UM06/		606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									Nitrite, nitrate - nonspecific	ND	22.7	UGL	R	
									Ethylbenzene	ND	5	UGL	R	
									Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL	R	
									cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
									1,2-Dichloroethane	ND	5	UGL	R	
									Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
									Toluene	ND	5	UGL	R	
									Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AB, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual.
WELL	91B15	91B15	11.0	20-MAR-92	PC	85200	UM05/	124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene /	ND	5	UGL	R	
								156-59-2	Tetrachloroethene / Perchloroethylen* cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	17	UGL	S	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	5	UGL	R	
							UM06/	100-01-6	4-Nitroaniline	ND	50	UGL	R	
								100-02-7	4-Nitrophenol	ND	50	UGL	R	
								100-51-6	Benzyl alcohol	ND	10	UGL	R	
								105-67-9	2,4-Dimethylphenol	ND	10	UGL	R	
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
								106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	
								106-47-8	4-Chloroaniline	ND	10	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								108-95-2		ND	10	UGL	R	

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anyly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quuls
WELL	91B15	91B15	11.0	20-MAR-92	PC	85200	UM06/	108-95-2	Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)

File Type: CGW

Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B15	91B15	11.0	20-MAR-92	PC 85200		UM06/	86-73-7 87-68-3	Fluorene / 9H-Fluorene Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND ND	10 10	UGL UGL	R R	
								87-86-5 88-06-2 88-74-4 88-75-5 91-20-3 91-57-6 91-58-7 91-94-1 95-48-7 95-50-1 95-57-8 95-95-4 98-95-3	Pentachlorophenol 2,4,6-Trichlorophenol 2-Nitroaniline 2-Nitrophenol Naphthalene / Tar camphor 2-Methylnaphthalene 2-Chloronaphthalene 3,3'-Dichlorobenzidine o-Cresol / 2-Cresol / 2-Methylphenol 1,2-Dichlorobenzene 2-Chlorophenol 2,4,5-Trichlorophenol Nitrobenzene / Essence of mirbane / Oil of mirbane	ND ND ND ND ND ND ND ND ND ND ND ND ND	50 10 50 10 10 50 20 10 10 10 50 10	UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL	R R R R R R R R R R R R R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									Unknown compound 565	ND	50	UGL	S	
									4-Nitroaniline	ND	50	UGL	R	
									4-Nitrophenol	ND	50	UGL	R	
									Benzyl alcohol	ND	10	UGL	R	
									2,4-Dimethylphenol	ND	10	UGL	R	
									p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
									1,4-Dichlorobenzene	ND	10	UGL	R	
									4-Chloroaniline	ND	10	UGL	R	
									Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
									Phenol / Carbolic acid / Phenic acid / Phenylc acid / Phe*	ND	10	UGL	R	
									Bis(2-chloroethyl) ether	ND	10	UGL	R	
									Bis(2-chloroethoxy) methane	ND	10	UGL	R	
									Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
									Di-n-octyl phthalate	ND	10	UGL	R	
									Hexachlorobenzene	ND	10	UGL	R	
									Anthracene	ND	10	UGL	R	
									1,2,4-Trichlorobenzene	ND	10	UGL	R	
									2,4-Dichlorophenol	ND	10	UGL	R	
									2,4-Dinitrotoluene	ND	10	UGL	R	
									Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
									Dimethyl phthalate	ND	10	UGL	R	
									Dibenzofuran	ND	10	UGL	R	
									Benzo[ghi]perylene	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B15	91B150	0.0	20-MAR-92	PC 85219		UM06/	193-39-5 205-99-2	Indeno[1,2,3-c,d]pyrene Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND ND	10 10	UGL UGL	R R	
								206-44-0 207-08-9 208-96-8 218-01-9 50-32-8 51-28-5 53-70-3	Fluoranthene Benzo[k]fluoranthene Acenaphthylene Chrysene Benzo[a]pyrene 2,4-Dinitrophenol Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND ND ND ND ND ND ND	10 10 10 10 10 50 10	UGL UGL UGL UGL UGL UGL UGL	R R R R R R R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1 56-55-3 59-50-7	1,3-Dichlorobenzene Benzofluoranthene 3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND ND ND	10 10 10	UGL UGL UGL	R R R	
								606-20-2 621-64-7 65-85-0 67-72-1 77-47-4 78-59-1 83-32-9 84-66-2 84-74-2 85-01-8 85-68-7 86-30-6 86-73-7 87-68-3	2,6-Dinitrotoluene N-Nitrosodi-n-propylamine Benzoic acid Hexachloroethane Hexachlorocyclopentadiene Isophorone Acenaphthene Diethyl phthalate Di-n-butyl phthalate Phenanthrene Butylbenzyl phthalate N-Nitrosodiphenylamine Fluorene / 9H-Fluorene Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND ND ND ND ND ND ND ND ND ND ND ND ND ND	10 10 50 10 10 10 10 10 10 10 10 10 10	UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL	R R R R R R R R R R R R R	
								87-86-5 88-06-2 88-74-4 88-75-5 91-20-3 91-57-6 91-58-7 91-94-1 95-48-7 95-50-1 95-57-8 95-95-4	Pentachlorophenol 2,4,6-Trichlorophenol 2-Nitroaniline 2-Nitrophenol Naphthalene / Tar camphor 2-Methylnaphthalene 2-Chloronaphthalene 3,3'-Dichlorobenzidine o-Cresol / 2-Cresol / 2-Methylphenol 1,2-Dichlorobenzene 2-Chlorophenol 2,4,5-Trichlorophenol	ND ND ND ND ND ND ND ND ND ND ND ND	50 10 50 10 10 10 50 20 10 10 10 50	UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL UGL	R R R R R R R R R R R R	

* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B15	91B15D	0.0	20-MAR-92	PC	85219	UM06/	98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									Unknown compound 565		50	UGL	S	
									Nitrite, nitrate - nonspecific		21.4	UGL		
									Ethylbenzene	ND	5	UGL	R	
									Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL	R	
									cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
									1,2-Dichloroethane	ND	5	UGL	R	
									Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
									Toluene	ND	5	UGL	R	
									Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
									Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
									Tetrachloroethylene / Perchloroethylen*	ND	5	UGL	R	
									cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
									trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
									Carbon tetrachloride	ND	5	UGL	R	
									Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
									Acetone	ND	18	UGL	S	
									Chloroform	ND	5	UGL	R	
									Benzene	ND	5	UGL	R	
									1,1,1-Trichloroethane	ND	5	UGL	R	
									Bromomethane	ND	5	UGL	R	
									Chloromethane	ND	10	UGL	R	
									Chloroethane	ND	10	UGL	R	
									Vinyl chloride / Chloroethene	ND	10	UGL	R	
									Methylene chloride / Dichloromethane	ND	5	UGL	R	
									Carbon disulfide	ND	5	UGL	R	
									Bromoform	ND	5	UGL	R	
									Bromodichloromethane	ND	5	UGL	R	
									1,1-Dichloroethane	ND	5	UGL	R	
									1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
									Trichlorofluoromethane	ND	5	UGL	R	
									1,2-Dichloropropane	ND	5	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Units
WELL	91B16	91B16	25.0	14-MAR-92	PC	77674	UM05/	108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND	5	UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene / Perchloroethylen*	ND	5	UGL	R	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Dichloroethene	ND	5	UGL	R	
								78-87-5	Trichlorofluoromethane	ND	5	UGL	R	
								78-93-3	1,2-Dichloropropane	ND	5	UGL	R	
								79-00-5	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-01-6	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-34-5	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
								100-01-6	Xylenes, total combined	ND	5	UGL	R	
								100-02-7	trans-1,3-Dichloropropene	ND	50	UGL	R	
								100-51-6	4-Nitroaniline	ND	50	UGL	R	
								105-67-9	4-Nitrophenol	ND	10	UGL	R	
								106-44-5	Benzyl alcohol	ND	10	UGL	R	
									2,4-Dimethylphenol	ND	10	UGL	R	
									p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quality
WELL	91B16	91B16	25.0	14-MAR-92	PC	77674	UM06/	106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	
								106-47-8	4-Chloroaniline	ND	10	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual S
WELL	91B16	91B16	25.0	14-MAR-92	PC 77674		UM06/	85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
									2,4-Dinitrotoluene	LT	.321	UGL		
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
									Cyclotetramethylenetetranitramine	LT	2.29	UGL		
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
									Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
									2,6-Dinitrotoluene	LT	.64	UGL		
									PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)methyl]propane	LT	5.02	UGL		
									2-Nitrotoluene	LT	.646	UGL		
									3-Nitrotoluene	LT	.492	UGL		
									1,3,5-Trinitrobenzene	LT	.517	UGL		
									1,3-Dinitrobenzene	LT	.319	UGL		
									4-Nitrotoluene	LT	.338	UGL		
									Mercury	LT	.74	UGL		
									Lead	LT	2.29	UGL		
									Thallium	LT	2.5	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anyly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Units
WELL	91B17	91B17	14.0	17-MAR-92	PC	81752	SD08/	7440-38-2	Arsenic	LT	6.01	UGL		
							SS15/W	7782-49-2	Selenium	LT	14.9	UGL		
								7429-90-5	Aluminum		1300	UGL		
								7439-89-6	Iron		2880	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium		12000	UGL		
								7439-96-5	Manganese		88.4	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium	LT	1250	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		7040	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium		23.2	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium		36.6	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper	LT	20	UGL		
								7440-62-2	Vanadium	LT	20	UGL		
								7440-66-6	Zinc		516	UGL		
								7440-70-2	Calcium		23700	UGL		
							TF13/	7782-49-2	Selenium	LT	75	UGL		
							TY03/	14797-55-8	Nitrite, nitrate - nonspecific		580	UGL		
							UM05/W	57-12-5	Cyanide	LT	8.17	UGL		
								100-41-4	Ethylbenzene	ND	5	UGL		
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL		
								107-06-2	1,2-Dichloroethane	ND	5	UGL		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL		
								108-88-3	Toluene	ND	5	UGL		
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL		
								127-18-4	Tetrachloroethylene / Tetrachloroethene	ND	5	UGL		
								156-59-2	cis-1,2-Dichloroethylene / Perchloroethylen*	ND	5	UGL		
								156-60-5	Dichloroethene trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)

File Type: CGW

Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

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15:23:00

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGM
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B17	91B17	14.0	17-MAR-92	PC 81752		UM06/	120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

15:23:00

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qtrts
WELL	91B17	91B17	14.0	17-MAR-92	PC 81752		UM06/	91-58-7 91-94-1 95-48-7 95-50-1 95-57-8 95-95-4 98-95-3	2-Chloronaphthalene 3,3'-Dichlorobenzidine o-Cresol / 2-Cresol / 2-Methylphenol 1,2-Dichlorobenzene 2-Chlorophenol 2,4,5-Trichlorophenol Nitrobenzene / Essence of mirbane / Oil of mirbane	ND ND ND ND ND ND ND	50 20 10 10 10 50 10	UGL UGL UGL UGL UGL UGL UGL	R R R R R R R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
								118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.321 .653	UGL UGL		
								2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	2.29 1.29	UGL UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT LT	.64 5.02	UGL UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
91B18	91B18	91B18	5.0	11-MAR-92	PC 74780		SB07/ TF13/ TY03/	7439-97-6 14797-55-8 57-12-5	Mercury Nitrite, nitrate - nonspecific Cyanide	LT LT LT	.74 29.6 8.17	UGL UGL UGL		
								7439-92-1	Lead	LT	23.8	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
								7429-90-5	Aluminum	LT	14400	UGL		
							SS15/	7439-89-6	Iron	LT	58000	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium	LT	1590	UGL		
								7439-96-5	Manganese	LT	2800	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium	LT	1250	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit	Flag Codes	Data Quals
WELL	91B18	91B18	6.0	11-MAR-92	PC	74780	SS15/	7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		3320	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium		219	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium		54.9	UGL		
								7440-48-4	Cobalt		28.4	UGL		
								7440-50-8	Copper		23.1	UGL		
								7440-62-2	Vanadium		44.5	UGL		
								7440-66-6	Zinc		540	UGL		
								7440-70-2	Calcium		6320	UGL		
								7782-49-2	Selenium	LT	75	UGL		
							UM05/	100-41-4	Ethylbenzene	ND	5	UGL	R	
								100-42-5	Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL	R	
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								107-06-2	1,2-Dichloroethane	ND	5	UGL	R	
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND	5	UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene / Perchloroethylen*	ND	5	UGL	R	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	11	UGL	S	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B18	91B18	6.0	11-MAR-92	PC	74780	UM06/	218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[ah]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	10	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	20	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									Unknown compound 532		9	UGL	S	

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

15:23:00

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly.	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Code	Data Quals
WELL	91B18	91B18	6.0	11-MAR-92	PC	74780	UW06/ UW35/	118-96-7	Unknown compound 651 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	30 .319	UGL UGL	S	
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7439-97-6	Mercury	LT	.74	UGL		
								7439-92-1	Lead	LT	28	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
								7429-90-5	Aluminum	LT	13700	UGL		
								7439-89-6	Iron	LT	57000	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium	LT	1470	UGL		
								7439-96-5	Manganese	LT	2900	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium	LT	1250	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium	LT	3340	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium	LT	230	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium	LT	42.7	UGL		
								7440-48-4	Cobalt	LT	33.5	UGL		
								7440-50-8	Copper	LT	23.1	UGL		
								7440-62-2	Vanadium	LT	42.5	UGL		
								7440-66-6	Zinc	LT	491	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW 24-OCT-94
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B18	91B180	6.0	11-MAR-92	PC	74799	SS15/	7440-70-2	Calcium		6170	UGL		
							TF13/	7782-49-2	Selenium	LT	75	UGL		
							TY03/	14797-55-8	Nitrite, nitrate - nonspecific		24.7	UGL		
							UM05/	57-12-5	Cyanide	LT	8.17	UGL		
								100-41-4	Ethylbenzene	ND	5	UGL	R	
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL	R	
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								107-06-2	1,2-Dichloroethane	ND	5	UGL	R	
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND	5	UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene / Tetrachloroethene / Perchloroethylen*	ND	5	UGL	R	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	50	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B18	91B180	6.0	11-MAR-92	PC	74799	UM05/	79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	5	UGL	R	
									4-Nitroaniline	ND	50	UGL	R	
									4-Nitrophenol	ND	50	UGL	R	
									Benzyl alcohol	ND	10	UGL	R	
									2,4-Dimethylphenol	ND	10	UGL	R	
									p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
									1,4-Dichlorobenzene	ND	10	UGL	R	
									4-Chloroaniline	ND	10	UGL	R	
									Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
									Phenol / Carbolic acid / Phenic acid	ND	10	UGL	R	
									/ Phenylc acid / Phe*	ND	10	UGL	R	
									Bis(2-chloroethyl) ether	ND	10	UGL	R	
									Bis(2-chloroethoxy) methane	ND	10	UGL	R	
									Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
									Di-n-octyl phthalate	ND	10	UGL	R	
									Hexachlorobenzene	ND	10	UGL	R	
									Anthracene	ND	10	UGL	R	
									1,2,4-Trichlorobenzene	ND	10	UGL	R	
									2,4-Dichlorophenol	ND	10	UGL	R	
									2,4-Dinitrotoluene	ND	10	UGL	R	
									Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
									Dimethyl phthalate	ND	10	UGL	R	
									Dibenzofuran	ND	10	UGL	R	
									Benzo[ghi]perylene	ND	10	UGL	R	
									Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
									Benzo[b]fluoranthene / 3,4-Benzo[fluoranthene	ND	10	UGL	R	
									Fluoranthene	ND	10	UGL	R	
									Benzo[k]fluoranthene	ND	10	UGL	R	
									Acenaphthylene	ND	10	UGL	R	
									Chrysene	ND	10	UGL	R	
									Benzo[a]pyrene	ND	10	UGL	R	
									2,4-Dinitrophenol	ND	50	UGL	R	
									Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
									4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
									1,3-Dichlorobenzene	ND	10	UGL	R	
									Benzo[a]anthracene	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quails
WELL	91B18	91B18D	6.0	11-MAR-92	PC	74799	UM06/	59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL	R	
									2,4-Dinitrotoluene	LT	.321	UGL		
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
									Cyclotetramethylenetetranitramine	LT	2.29	UGL		
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
									Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		

* - Analyte Description has been truncated. See Data Dictionary

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Installation : Anniston AD, AL (AN)

File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

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* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Units
WELL	91B19	91B19	17.0	30-MAR-92	PC 94986	UM05/	UM05/	108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen* Toluene	ND	10	UGL	R	
								108-88-3	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								108-90-7	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								124-48-1	Tetrachloroethylene / Perchloroethylen*	ND	5	UGL	R	
								127-18-4	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-59-2	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	Carbon tetrachloride	ND	5	UGL	R	
								56-23-5	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								591-78-6	Acetone	ND	13	UGL	S	
								67-64-1	Chloroform	ND	5	UGL	R	
								67-66-3	Benzene	ND	5	UGL	R	
								71-43-2	1,1,1-Trichloroethane	ND	5	UGL	R	
								71-55-6	Bromomethane	ND	5	UGL	R	
								74-83-9	Chloromethane	ND	10	UGL	R	
								74-87-3	Chloroethane	ND	10	UGL	R	
								75-00-3	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-01-4	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-09-2	Carbon disulfide	ND	5	UGL	R	
								75-15-0	Bromoform	ND	5	UGL	R	
								75-25-2	Bromodichloromethane	ND	5	UGL	R	
								75-27-4	1,1-Dichloroethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-35-4	Trichlorofluoromethane	ND	5	UGL	R	
								75-69-4	1,2-Dichloropropane	ND	5	UGL	R	
								78-87-5	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								78-93-3	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-00-5	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-01-6	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
								79-34-5	Unknown compound 224	ND	20	UGL	S	
								UM06/	Xylenes, total combined	ND	5	UGL	R	
								100-01-6	trans-1,3-Dichloropropene	ND	5	UGL	R	
								100-02-7	4-Nitroaniline	ND	50	UGL	R	
								100-51-6	4-Nitrophenol	ND	50	UGL	R	
								105-67-9	Benzyl alcohol	ND	10	UGL	R	
									2,4-Dimethylphenol	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

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 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quality
WELL	91819	91819	17.0	30-MAR-92	94986	PC	UM06/	106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
								106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	
								106-47-8	4-Chloroaniline	ND	10	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								2921-88-2	Chlorpyrifos / Phosphorothioic acid 0,0-diethyl 0-(3,5,6-t*	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Lab PC	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B19	91B19	17.0	30-MAR-92	94986		PC	UW06/	84-66-2	Diethyl phthalate	ND	10	UGL	R	
									84-74-2	D1-n-butyl phthalate	ND	10	UGL	R	
									85-01-8	Phenanthrene	ND	10	UGL	R	
									85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
									86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
									86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
									87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
									87-86-5	Pentachlorophenol	ND	50	UGL	R	
									88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
									88-74-4	2-Nitroaniline	ND	50	UGL	R	
									88-75-5	2-Nitrophenol	ND	10	UGL	R	
									91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
									91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
									91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
									91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
									95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
									95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
									95-57-8	2-Chlorophenol	ND	10	UGL	R	
									95-95-4	2,4,5-Trichlorophenol	ND	10	UGL	R	
									98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
									99-09-2	3-Nitroaniline	ND	50	UGL	R	
										4-Bromophenyl phenyl ether	ND	10	UGL	R	
										4-Chlorophenyl phenyl ether	ND	10	UGL	R	
										Unknown compound 539		60	UGL	S	
										Unknown compound 560		10	UGL	S	
										Unknown compound 565		40	UGL	S	
										Unknown compound 598		10	UGL	S	
										2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
										2,4-Dinitrotoluene	LT	.321	UGL		
										RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
										Cyclotetramethylenetetranitramine	LT	2.29	UGL		
										Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
										Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
										2,6-Dinitrotoluene	LT	.64	UGL		
										PEIN / Pentaerythritol tetranitrate /	LT	5.02	UGL		
										2,2-Bis[(nitrooxy)me*]					
										2-Nitrotoluene	LT	.646	UGL		
										3-Nitrotoluene	LT	.492	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Code	Data Qual
WELL	91B19	91B19	17.0	30-MAR-92	94986	PC	UM35/W	99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		K
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		K
								99-99-0	4-Nitrotoluene		2.25	UGL	U	K
								7440-38-2	Arsenic		11.6	UGL		
								7439-97-6	Mercury		.74	UGL		
								7439-92-1	Lead		18.2	UGL		
								7440-28-0	Thallium		2.5	UGL		
								7440-38-2	Arsenic		6.01	UGL		
								7782-49-2	Selenium		14.9	UGL		
								7429-90-5	Aluminum		5630	UGL		
								7439-89-6	Iron		17000	UGL		
								7439-92-1	Lead		100	UGL		
								7439-95-4	Magnesium		4910	UGL		
								7439-96-5	Manganese		305	UGL		
								7439-98-7	Molybdenum		30.9	UGL		
								7440-02-0	Nickel		63.1	UGL		
								7440-09-7	Potassium		1250	UGL		
								7440-22-4	Silver		105	UGL		
								7440-23-5	Sodium		1190	UGL		
								7440-28-0	Thallium		100	UGL		
								7440-36-0	Antimony		37.1	UGL		
								7440-39-3	Barium		22.2	UGL		
								7440-41-7	Beryllium		2.5	UGL		
								7440-43-9	Cadmium		5	UGL		
								7440-47-3	Chromium		110	UGL		
								7440-48-4	Cobalt		25	UGL		
								7440-50-8	Copper		20	UGL		
								7440-62-2	Vanadium		29.3	UGL		
								7440-66-6	Zinc		665	UGL		
								7440-70-2	Calcium		13200	UGL		
								7782-49-2	Selenium		75	UGL		
								14797-55-8	Nitrite, nitrate - nonspecific		375	UGL		
								57-12-5	Cyanide		8.17	UGL		
								100-41-4	Ethylbenzene	ND	5	UGL	R	
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL	R	
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								107-06-2	1,2-Dichloroethane	ND	5	UGL	R	
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND	5	UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quails
WELL	91B20	91B20	13.0	17-MAR-92	PC	80047	UM05/	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
							124-48-1	Tetrachloroethylene / Perchloroethylen*	ND	5	UGL	R	
							127-18-4	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
							156-59-2	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
							156-60-5	Carbon tetrachloride	ND	5	UGL	R	
							56-23-5	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
							591-78-6	Acetone	ND	10	UGL	R	
							67-64-1	Chloroform	ND	5	UGL	R	
							71-43-2	Benzene	ND	5	UGL	R	
							71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
							74-83-9	Bromomethane	ND	10	UGL	R	
							74-87-3	Chloromethane	ND	10	UGL	R	
							75-00-3	Vinyl chloride / Chloroethene	ND	10	UGL	R	
							75-01-4	Methylene chloride / Dichloromethane	ND	5	UGL	R	
							75-09-2	Carbon disulfide	ND	5	UGL	R	
							75-15-0	Bromoform	ND	5	UGL	R	
							75-25-2	Bromodichloromethane	ND	5	UGL	R	
							75-27-4	1,1-Dichloroethane	ND	5	UGL	R	
							75-34-3	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
							75-35-4	Trichlorofluoromethane	ND	5	UGL	R	
							75-69-4	1,2-Dichloropropane	ND	5	UGL	R	
							78-87-5	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
							78-93-3	1,1,2-Trichloroethane	ND	5	UGL	R	
							79-00-5	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
							79-01-6	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
							79-34-5	Xylenes, total combined	ND	5	UGL	R	
								trans-1,3-Dichloropropane	ND	5	UGL	R	
								4-Nitroaniline	ND	50	UGL	R	
							100-01-6	4-Nitrophenol	ND	50	UGL	R	
							100-02-7	Benzyl alcohol	ND	10	UGL	R	
							100-51-6	2,4-Dimethylphenol	ND	10	UGL	R	
							105-67-9	p-Cresol / 4-Cresol	ND	10	UGL	R	
							106-44-5	1,4-Dichlorobenzene	ND	10	UGL	R	
							106-46-7	4-Chloroaniline	ND	10	UGL	R	
							106-47-8	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
							108-60-1		ND	10	UGL	R	
							108-95-2		ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B20	91B20	13.0	17-MAR-92	PC 80047		UM06/	108-95-2	Phenol / Carbolic acid / Phenic acid / Phenyllic acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-c,d]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[fa]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qualls
WELL	91B20	91B20	13.0	17-MAR-92	PC 80047		UM06/	86-73-7 87-68-3	Fluorene / 9H-Fluorene Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND ND	10 10	UGL UGL	R R	
								87-86-5 88-06-2 88-74-4 88-75-5	Pentachlorophenol 2,4,6-Trichlorophenol 2-Nitroaniline 2-Nitrophenol	ND ND ND ND	50 10 50 10	UGL UGL UGL UGL	R R R R	
								91-20-3 91-57-6 91-58-7 91-94-1	Naphthalene / Tar camphor 2-Methylnaphthalene 2-Chloronaphthalene 3,3'-Dichlorobenzidine	ND ND ND ND	10 10 10 20	UGL UGL UGL UGL	R R R R	
								95-48-7 95-50-1 95-57-8 95-95-4	o-Cresol / 2-Cresol / 2-Methylphenol 1,2-Dichlorobenzene 2-Chlorophenol 2,4,5-Trichlorophenol	ND ND ND ND	10 10 10 50	UGL UGL UGL UGL	R R R R	
								98-95-3 99-09-2	Nitrobenzene / Essence of mirbane / Oil of mirbane 3-Nitroaniline	ND ND	10 50	UGL UGL	R R	
									4-Bromophenyl phenyl ether 4-Chlorophenyl phenyl ether Unknown compound 651	ND ND ND	10 10 30	UGL UGL UGL	R R S	
							UM35/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.321 .653	UGL UGL		
								2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	2.29 1.29	UGL UGL		
								55-63-0	Nitroglycerine / 1,2,3-propanetriol trinitrate	LT	3.2	UGL		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)methyl]propane	LT LT	.64 5.02	UGL UGL		
								88-72-2 99-08-1 99-35-4 99-65-0	2-Nitrotoluene 3-Nitrotoluene 1,3,5-Trinitrobenzene 1,3-Dinitrobenzene	LT LT LT LT	.646 .492 .517 .319	UGL UGL UGL UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
91B21	91B21	91B21	10.0	18-MAR-92	PC 81787		TF13/ UM05/	14797-55-8 100-41-4 100-42-5	Nitrite, nitrate - nonspecific Ethylbenzene Styrene / Ethylbenzene / Styrol / Styrolene / Cinname * 10061-01-5	ND ND	5 5	UGL UGL	R R	

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

15:23:00

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quants
WELL	91B21	91B21	10.0	18-MAR-92	PC	81787	UM05/	10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								107-06-2	1,2-Dichloroethane	ND	5	UGL	R	
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND	5	UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene / Perchloroethylen*	ND	5	UGL	R	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	50	UGL	R	
									4-Nitroaniline	ND	50	UGL	R	
									4-Nitrophenol	ND	50	UGL	R	
							UM06/	100-01-6						
								100-02-7						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quality
WELL	91B21	91B21	10.0	18-MAR-92	PC	81787	UM06/	100-51-6	Benzyl alcohol	ND	10	UGL	R	
								105-67-9	2,4-Dimethylphenol	ND	10	UGL	R	
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
								106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	
								106-47-8	4-Chloroaniline	ND	10	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[a,h]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	

* - Analyte description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CGW 24-OCT-94
Sampling Date Range: 01-JAN-91

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B21	91B21	10.0	18-MAR-92	PC	81787	UM06/	83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	50	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
							UW35/		2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B21	91B21	10.0	20-MAR-92	PC	85190 85197	SB07/ SD08/	7439-97-6 7439-92-1 7440-28-0	Mercury Lead Thallium	LT	.74 1.84 2.5	UGL UGL UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
							SS15/W	7429-90-5	Aluminum		1440	UGL		
								7439-89-6	Iron		2650	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium		33000	UGL		
								7439-96-5	Manganese		89.4	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium	LT	1250	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium	LT	2220	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium	UGL	27.2	UGL		
								7440-41-7	Beryllium	UGL	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium	LT	35.6	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper	LT	20	UGL		
								7440-62-2	Vanadium	LT	20	UGL		
								7440-66-6	Zinc		1090	UGL		
								7440-70-2	Calcium		63000	UGL		
								7782-49-2	Selenium	LT	75	UGL		
							TY03/ SD08/	57-12-5	Cyanide	LT	8.17	UGL		D
								7439-92-1	Lead	LT	1.77	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		D
								7440-38-2	Arsenic	LT	6.01	UGL		D
								7782-49-2	Selenium	LT	14.9	UGL		D
							SB07/ SD08/	7439-97-6	Mercury	LT	.74	UGL		
								7439-92-1	Lead		1.62	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
							SS15/W	7429-90-5	Aluminum		711	UGL		
								7439-89-6	Iron		1580	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium		8020	UGL		
								7439-96-5	Manganese		102	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW 24-OCT-94
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Outlets
WELL	91B22	91B22	8.0	24-MAR-92	PC	87432	SS15/W	7440-09-7	Potassium	LT	1250	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		3060	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium	LT	20	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium	LT	15	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper	LT	20	UGL		
								7440-62-2	Vanadium	LT	20	UGL		
								7440-66-6	Zinc		479	UGL		
								7440-70-2	Calcium		15900	UGL		
								7782-49-2	Selenium	LT	75	UGL		
							TF13/	14797-55-8	Nitrite, nitrate - nonspecific					
							TY03/	57-12-5	Cyanide	LT	68.3	UGL		
							UM05/W	100-41-4	Ethylbenzene	ND	5	UGL		
								100-42-5	Styrene / Ethylbenzene / Styrol / Styroene / Cinnamene *	ND	5	UGL		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL		
								107-06-2	1,2-Dichloroethane	ND	5	UGL		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL		
								108-88-3	Toluene	ND	5	UGL		
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL		
								127-18-4	Tetrachloroethylene / Tetrachloroethene / Perchloroethylen*	ND	5	UGL		
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL		
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL		
								56-23-5	Carbon tetrachloride	ND	5	UGL		
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL		
								67-64-1	Acetone	ND	10	UGL		
								67-66-3	Chloroform	ND	5	UGL		
								71-43-2	Benzene	ND	5	UGL		
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL		
								74-83-9	Bromomethane	ND	10	UGL		
								74-87-3	Chloromethane	ND	10	UGL		
								75-00-3	Chloroethane	ND	10	UGL		

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Final Documentation Appendix Report
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File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual.
WELL	91B22	91B22	8.0	24-MAR-92	PC	87432	UM05/W	75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND		UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6	Trichloroethylene /Trichloroethene / Ethinyl trichloride /T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	5	UGL	R	
									4-Nitroaniline	ND	50	UGL	R	
									4-Nitrophenol	ND	50	UGL	R	
									Benzyl alcohol	ND	10	UGL	R	
									2,4-Dimethylphenol	ND	10	UGL	R	
									p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
									1,4-Dichlorobenzene	ND	10	UGL	R	
									4-Chloroaniline	ND	10	UGL	R	
									Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
									Phenol / Carbolic acid / Phenic acid / Phenylic acid / Phe*	ND	10	UGL	R	
									Bis(2-chloroethyl) ether	ND	10	UGL	R	
									Bis(2-chloroethoxy) methane	ND	10	UGL	R	
									Bis(2-ethylhexyl) phthalate		41	UGL	S	
									Di-n-octyl phthalate	ND	10	UGL	R	
									Hexachlorobenzene	ND	10	UGL	R	
									Anthracene	ND	10	UGL	R	
									1,2,4-Trichlorobenzene	ND	10	UGL	R	
									2,4-Dichlorophenol	ND	10	UGL	R	
									2,4-Dinitrotoluene	ND	10	UGL	R	
									Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
									Dimethyl phthalate	ND	10	UGL	R	
									Dibenzofuran	ND	10	UGL	R	
									Benzo[ghi]perylene	ND	10	UGL	R	
									Indeno[1,2,3-C,Di]pyrene	ND	10	UGL	R	
									Benzo[b]fluoranthene / 3,4-Benzo[fluoranthene	ND	10	UGL	R	

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File Type: CGW 24-OCT-94
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quails
WELL	91B22	91B22	8.0	24-MAR-92	PC	87432	UM06/	206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[fa]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

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 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quits
WELL	91822	91822	8.0	24-MAR-92	PC	87432	UM06/	118-96-7	4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		K
									2,4-Dinitrotoluene	LT	.321	UGL		K
									RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		K
									Cyclotetramethylenetetranitramine	LT	2.29	UGL		K
									Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		K
									Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		K
									2,6-Dinitrotoluene	LT	.64	UGL		K
									PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT	5.02	UGL		K
									2-Nitrotoluene	LT	.646	UGL		K
									3-Nitrotoluene	LT	.492	UGL		K
									1,3,5-Trinitrobenzene	LT	.517	UGL		K
									1,3-Dinitrobenzene	LT	.319	UGL		K
									4-Nitrotoluene	LT	.338	UGL		K
91823	91823	91823	6.0	24-MAR-92	PC	87424	SD08/	7439-92-1	Lead	LT	12.1	UGL		K
									Thallium	LT	2.5	UGL		K
									Arsenic	LT	6.01	UGL		K
									Selenium	LT	14.9	UGL		K
									Aluminum		9690	UGL		K
									Iron	LT	29000	UGL		K
									Lead		100	UGL		K
									Magnesium		26700	UGL		K
									Manganese		723	UGL		K
									Molybdenum	LT	30.9	UGL		K
									Nickel	LT	63.1	UGL		K
									Potassium	LT	1490	UGL		K
									Silver	LT	12.5	UGL		K
									Sodium	LT	1190	UGL		K
									Thallium	LT	100	UGL		K
									Antimony	LT	37.1	UGL		K
									Barium	LT	64.5	UGL		K
									Beryllium	LT	2.5	UGL		K
									Cadmium	LT	5	UGL		K
									Chromium	LT	44.8	UGL		K
									Cobalt	LT	25	UGL		K
									Copper	LT	20	UGL		K
									Vanadium		52.6	UGL		K
									Zinc		49.7	UGL		K

* - Analyte Description has been truncated. See Data Dictionary

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 Installation :Anniston AD, AL (AN)
 File Type: CGW 24-OCT-94
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Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Units
WELL	91823	91823	6.0	24-MAR-92	PC	87424	SS15/W	7440-70-2	Calcium	LT	50000	UGL		
								7782-49-2	Selenium		75	UGL		
							TF13/	14797-55-8	Nitrite, nitrate - nonspecific	LT	200	UGL		
							TY03/	57-12-5	Cyanide	ND	8.17	UGL	R	
							UM05/W	100-41-4	Ethylbenzene	ND	5	UGL	R	
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								107-06-2	1,2-Dichloroethane	ND	5	UGL	R	
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND	5	UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene /	ND	5	UGL	R	
								156-59-2	Tetrachloroethene / Perchloroethylen* cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6						

* - Analyte Description has been truncated. See Data Dictionary

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 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Units
WELL	91B23	91B23	6.0	24-MAR-92	PC 87424	UM05/W	79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
							79-34-5	Tetrachloroethane / 1,1,2,2-tetrachloroethane / Acetylene *	ND	5	UGL	R	
								Xylenes, total combined	ND	5	UGL	R	
								trans-1,3-Dichloropropene	ND	50	UGL	R	
								4-Nitroaniline	ND	50	UGL	R	
								4-Nitrophenol	ND	10	UGL	R	
								Benzyl alcohol	ND	10	UGL	R	
								2,4-Dimethylphenol	ND	10	UGL	R	
								p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
								1,4-Dichlorobenzene	ND	10	UGL	R	
								4-Chloroaniline	ND	10	UGL	R	
								Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								Phenol / Carboic acid / Phenic acid	ND	10	UGL	R	
								/ Phenyllic acid / Phe*	ND	10	UGL	R	
								Bis(2-chloroethyl) ether	ND	10	UGL	R	
								Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								Di-n-octyl phthalate	ND	10	UGL	R	
								Hexachlorobenzene	ND	10	UGL	R	
								Anthracene	ND	10	UGL	R	
								1,2,4-Trichlorobenzene	ND	10	UGL	R	
								2,4-Dichlorophenol	ND	10	UGL	R	
								2,4-Dinitrotoluene	ND	10	UGL	R	
								Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								Dimethyl phthalate	ND	10	UGL	R	
								Dibenzofuran	ND	10	UGL	R	
								Benzo[ghi]perylene	ND	10	UGL	R	
								Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								Benzo[b]fluoranthene / 3,4-	ND	10	UGL	R	
								Benzo[fluoranthene	ND	10	UGL	R	
								Fluoranthene	ND	10	UGL	R	
								Benzo[k]fluoranthene	ND	10	UGL	R	
								Acenaphthylene	ND	10	UGL	R	
								Chrysene	ND	10	UGL	R	
								Benzo[a]pyrene	ND	10	UGL	R	
								2,4-Dinitrophenol	ND	50	UGL	R	
								Dibenzo[ah]anthracene / 1,2,5,6-	ND	10	UGL	R	
								Dibenzanthracene	ND	50	UGL	R	
								4,6-Dinitro-2-cresol / 2-Methyl-4,6-	ND	50	UGL	R	
								dinitrophenol	ND	10	UGL	R	
								1,3-Dichlorobenzene	ND	10	UGL	R	
								Benzo[a]anthracene	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quality
WELL	91B23	91B23	6.0	24-MAR-92	PC 87424		UW06/	59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
							UW35/W	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

[illegible]

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)

File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual.
WELL	91B24	91B24	47.0	15-MAR-92	PC	77712	UM05/	108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL	R	
								108-88-3	Toluene	ND		UGL	R	
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL	R	
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene /	ND	5	UGL	R	
								156-59-2	Tetrachloroethene / Perchloroethylen* cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6	Trichloroethylene / Trichloroethene / Ethinyl trichloride / T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	5	UGL	R	
									4-Nitroaniline	ND	50	UGL	R	
									4-Nitrophenol	ND	50	UGL	R	
									Benzyl alcohol	ND	10	UGL	R	
									2,4-Dimethylphenol	ND	10	UGL	R	
									p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quils
WELL	91B24	91B24	47.0	15-MAR-92	PC	77712	UM06/	106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	
								106-47-8	4-Chloroaniline	ND	10	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								108-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

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15:23:00

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	91B24	91B24	47.0	15-MAR-92	PC 77712		UM06/	85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	
								86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									Unknown compound 550	ND	30	UGL	S	
									Unknown compound 651	ND	20	UGL	S	
							UW35/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PEIN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
AAD13		AAD13	25.0	01-FEB-92	PC 36552		S807/	7439-97-6	Mercury	LT	.74	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data
WELL	AA013	AA013	25.0	01-FEB-92	PC 36552		SD08/	7439-92-1	Lead	LT	1.26	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
								7429-90-5	Aluminum		236	UGL		
							SS15/	7439-89-6	Iron		4890	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium		1260	UGL		
								7439-96-5	Manganese		212	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium	LT	1250	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		788	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium	LT	20	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium	LT	15	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper	LT	20	UGL		
								7440-62-2	Vanadium	LT	20	UGL		
								7440-66-6	Zinc		1070	UGL		
								7440-70-2	Calcium		18600	UGL		
								7782-49-2	Selenium	LT	75	UGL		
							TF13/	14797-55-8	Nitrite, nitrate - nonspecific					
							TY03/	57-12-5	Cyanide	LT	271	UGL		
							UW35/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	8.17	UGL		
								121-14-2	2,4-Dinitrotoluene		.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *		40.6	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine		86	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis(nitrooxy)me*	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quats
WELL	AA013	AA013	25.0	01-FEB-92	PC 36552		UW35/	99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
								7439-97-6	Mercury	LT	.74	UGL		
								7439-92-1	Lead		5.12	UGL		
								7440-28-0	Thallium	LT	2.5	UGL		
								7440-38-2	Arsenic	LT	6.01	UGL		
								7782-49-2	Selenium	LT	14.9	UGL		
								7429-90-5	Aluminum		591	UGL		
								7439-89-6	Iron		2220	UGL		
								7439-92-1	Lead	LT	100	UGL		
								7439-95-4	Magnesium		3790	UGL		
								7439-96-5	Manganese		469	UGL		
								7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel	LT	63.1	UGL		
								7440-09-7	Potassium		12300	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		2770	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium		51.4	UGL		
								7440-41-7	Beryllium	LT	2.5	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium	LT	15	UGL		
								7440-48-4	Cobalt	LT	25	UGL		
								7440-50-8	Copper	LT	20	UGL		
								7440-62-2	Vanadium	LT	20	UGL		
								7440-66-6	Zinc		426	UGL		
								7440-70-2	Calcium		38400	UGL		
								7782-49-2	Selenium	LT	75	UGL		
								57-12-5	Cyanide	LT	8.17	UGL		
								100-41-4	Ethylbenzene	ND	5	UGL		
								100-42-5	Styrene / Ethylbenzene / Styrol / Styrolene / Cinnamene *	ND	5	UGL		
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL		
								107-06-2	1,2-Dichloroethane	ND	5	UGL		
								108-10-1	Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND	10	UGL		
								108-88-3	Toluene	ND	5	UGL		
								108-90-7	Chlorobenzene / Monochlorobenzene	ND	5	UGL		
								124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL		
								127-18-4	Tetrachloroethylene / Perchloroethylen*	ND	5	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual.
WELL	W2-17	2-17	38.0	17-MAR-92	PC	81760	UM05/	156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloroethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	K	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Dichloroethene					
								75-69-4	Trichlorofluoromethane	ND	5	UGL	R	
								78-87-5	1,2-Dichloropropane	ND	5	UGL	R	
								78-93-3	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-00-5	1,1,2-Trichloroethane	ND	5	UGL	R	
								79-01-6	Trichloroethylene /Trichloroethene / Ethinyl trichloride /T*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	5	UGL	R	
							UM06/	100-01-6	4-Nitroaniline	ND	50	UGL	R	
								100-02-7	4-Nitrophenol	ND	50	UGL	R	
								100-51-6	Benzyl alcohol	ND	10	UGL	R	
								105-67-9	2,4-Dimethylphenol	ND	10	UGL	R	
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
								106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	
								106-47-8	4-Chloroaniline	ND	10	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								108-95-2	Phenol / Carbolic acid / Phenic acid / Phenylic acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Units
WELL	W2-17	2-17	38.0	17-MAR-92	81760	PC	UM06/	117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzofdeflphenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzoflphenylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzoflfluoranthene / 3,4-	ND	10	UGL	R	
								206-44-0	Benzofluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzoflpyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenzoflfluoranthene / 1,2:5,6-	ND	10	UGL	R	
								534-52-1	Dibenzanthracene	ND	50	UGL	R	
								541-73-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-	ND	10	UGL	R	
								56-55-3	dinitrophenol	ND	10	UGL	R	
								59-50-7	1,3-Dichlorobenzene	ND	10	UGL	R	
								606-20-2	Benzo[alanthracene	ND	10	UGL	R	
								621-64-7	3-Methyl-4-chlorophenol / 4-Chloro-3-	ND	10	UGL	R	
								65-85-0	cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								67-72-1	2,6-Dinitrotoluene	ND	10	UGL	R	
								77-47-4	N-Nitrosodi-n-propylamine	ND	50	UGL	R	
								78-59-1	Benzoic acid	ND	10	UGL	R	
								83-32-9	Hexachloroethane	ND	10	UGL	R	
								84-66-2	Hexachlorocyclopentadiene	ND	10	UGL	R	
								84-74-2	Isophorone	ND	10	UGL	R	
								85-01-8	Acenaphthene	ND	10	UGL	R	
								85-68-7	Diethyl phthalate	ND	10	UGL	R	
								86-30-6	Di-n-butyl phthalate	ND	10	UGL	R	
								86-73-7	Phenanthrene	ND	10	UGL	R	
								87-68-3	Butylbenzyl phthalate	ND	10	UGL	R	
								87-86-5	N-Nitrosodiphenylamine	ND	10	UGL	R	
								88-06-2	Fluorene / 9H-Fluorene	ND	10	UGL	R	
									Hexachlorobutadiene / Hexachloro-1,3-	ND	10	UGL	R	
									butadiene	ND	50	UGL	R	
									Pentachlorophenol	ND	10	UGL	R	
									2,4,6-Trichlorophenol	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly. No.	Lab Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	W2-17	2-17	38.0	17-MAR-92	PC	81760	UM06/	88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	50	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	20	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	10	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
							UW35/	118-96-7	4-Bromophenyl phenyl ether 4-Chlorophenyl phenyl ether 2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	ND ND LT	10 10 .319	UGL UGL UGL	R R R	
								121-14-2 121-82-4	2,4-Dinitrotoluene RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT LT	.321 .653	UGL UGL		
								2691-41-0 479-45-8	Cyclotetramethylenetetranitramine Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT LT	2.29 1.29	UGL UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2 78-11-5	2,6-Dinitrotoluene PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me*]	LT LT	.64 5.02	UGL UGL		
								88-72-2 99-08-1 99-35-4 99-65-0 99-99-0	2-Nitrotoluene 3-Nitrotoluene 1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 4-Nitrotoluene	LT LT LT LT LT	.646 .492 .517 .319 .338	UGL UGL UGL UGL UGL		
								100-41-4 100-42-5	Ethylbenzene Styrene / Ethenylbenzene / Styrol / Styrolene / Cinnamene *	ND ND	5 5	UGL UGL	R R	
								10061-01-5	cis-1,3-Dichloropropylene / cis-1,3-Dichloropropene	ND	5	UGL	R	
								107-06-2 108-10-1	1,2-Dichloroethane Methyl isobutyl ketone / Isopropylacetone / 4-Methyl-2-pen*	ND ND	5 10	UGL UGL	R R	
								108-88-3 108-90-7 124-48-1	Toluene Chlorobenzene / Monochlorobenzene	ND ND	5 5	UGL UGL	R R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation : Anniston AD, AL (AN)
File Type: CGW
Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab	Lab Anly. No.	Meth/Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Qual.
WELL	W2-18	MW2-18	49.0	12-FEB-92	PC	49166	UM05/	124-48-1	Dibromochloromethane / Chlorodibromomethane	ND	5	UGL	R	
								127-18-4	Tetrachloroethylene / Tetrachloroethene	ND	5	UGL	R	
								156-59-2	cis-1,2-Dichloroethylene / cis-1,2-Dichloroethene	ND	5	UGL	R	
								156-60-5	trans-1,2-Dichloroethylene / trans-1,2-Dichloroethene	ND	5	UGL	R	
								56-23-5	Carbon tetrachloride	ND	5	UGL	R	
								591-78-6	Methyl n-butyl ketone / 2-Hexanone	ND	10	UGL	R	
								67-64-1	Acetone	ND	10	UGL	R	
								67-66-3	Chloroform	ND	5	UGL	R	
								71-43-2	Benzene	ND	5	UGL	R	
								71-55-6	1,1,1-Trichloroethane	ND	5	UGL	R	
								74-83-9	Bromomethane	ND	10	UGL	R	
								74-87-3	Chloromethane	ND	10	UGL	R	
								75-00-3	Chloroethane	ND	10	UGL	R	
								75-01-4	Vinyl chloride / Chloroethene	ND	10	UGL	R	
								75-09-2	Methylene chloride / Dichloromethane	ND	5	UGL	R	
								75-15-0	Carbon disulfide	ND	5	UGL	R	
								75-25-2	Bromoform	ND	5	UGL	R	
								75-27-4	Bromodichloromethane	ND	5	UGL	R	
								75-34-3	1,1-Dichloroethane	ND	5	UGL	R	
								75-35-4	1,1-Dichloroethylene / 1,1-Dichloroethene	ND	5	UGL	R	
								75-69-4	Dichloroethene	ND	5	UGL	R	
								78-87-5	Trichlorofluoromethane	ND	5	UGL	R	
								78-93-3	1,2-Dichloropropane	ND	5	UGL	R	
								79-00-5	Methyl ethyl ketone / 2-Butanone	ND	10	UGL	R	
								79-01-6	1,1,2-Trichloroethane	ND	5	UGL	R	
									Trichloroethylene /Trichloroethene / Ethinyl trichloride /t*	ND	5	UGL	R	
								79-34-5	Tetrachloroethane / 1,1,2,2-Tetrachloroethane / Acetylene *	ND	5	UGL	R	
									Xylenes, total combined	ND	5	UGL	R	
									trans-1,3-Dichloropropene	ND	5	UGL	R	
				13-FEB-92	PC	49166	UM06/	100-01-6	4-Nitroaniline	ND	50	UGL	R	
								100-02-7	4-Nitrophenol	ND	50	UGL	R	
								100-51-6	Benzyl alcohol	ND	10	UGL	R	
								105-67-9	2,4-Dimethylphenol	ND	10	UGL	R	
								106-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	ND	10	UGL	R	
								106-46-7	1,4-Dichlorobenzene	ND	10	UGL	R	
								106-47-8	4-Chloroaniline	ND	10	UGL	R	
								108-60-1	Bis(2-chloroisopropyl) ether	ND	10	UGL	R	
								108-95-2		ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	W2-18	MM2-18	49.0	13-FEB-92	PC	49166	UM06/	108-95-2	Phenol / Carboic acid / Phenic acid / Phenyllic acid / Phe*	ND	10	UGL	R	
								111-44-4	Bis(2-chloroethyl) ether	ND	10	UGL	R	
								111-91-1	Bis(2-chloroethoxy) methane	ND	10	UGL	R	
								117-81-7	Bis(2-ethylhexyl) phthalate	ND	10	UGL	R	
								117-84-0	Di-n-octyl phthalate	ND	10	UGL	R	
								118-74-1	Hexachlorobenzene	ND	10	UGL	R	
								120-12-7	Anthracene	ND	10	UGL	R	
								120-82-1	1,2,4-Trichlorobenzene	ND	10	UGL	R	
								120-83-2	2,4-Dichlorophenol	ND	10	UGL	R	
								121-14-2	2,4-Dinitrotoluene	ND	10	UGL	R	
								129-00-0	Benzo[def]phenanthrene / Pyrene	ND	10	UGL	R	
								131-11-3	Dimethyl phthalate	ND	10	UGL	R	
								132-64-9	Dibenzofuran	ND	10	UGL	R	
								191-24-2	Benzo[ghi]perylene	ND	10	UGL	R	
								193-39-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
								205-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	ND	10	UGL	R	
								206-44-0	Fluoranthene	ND	10	UGL	R	
								207-08-9	Benzo[k]fluoranthene	ND	10	UGL	R	
								208-96-8	Acenaphthylene	ND	10	UGL	R	
								218-01-9	Chrysene	ND	10	UGL	R	
								50-32-8	Benzo[a]pyrene	ND	10	UGL	R	
								51-28-5	2,4-Dinitrophenol	ND	50	UGL	R	
								53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	ND	10	UGL	R	
								534-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	ND	50	UGL	R	
								541-73-1	1,3-Dichlorobenzene	ND	10	UGL	R	
								56-55-3	Benzo[a]anthracene	ND	10	UGL	R	
								59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	ND	10	UGL	R	
								606-20-2	2,6-Dinitrotoluene	ND	10	UGL	R	
								621-64-7	N-Nitrosodi-n-propylamine	ND	10	UGL	R	
								65-85-0	Benzoic acid	ND	50	UGL	R	
								67-72-1	Hexachloroethane	ND	10	UGL	R	
								77-47-4	Hexachlorocyclopentadiene	ND	10	UGL	R	
								78-59-1	Isophorone	ND	10	UGL	R	
								83-32-9	Acenaphthene	ND	10	UGL	R	
								84-66-2	Diethyl phthalate	ND	10	UGL	R	
								84-74-2	Di-n-butyl phthalate	ND	10	UGL	R	
								85-01-8	Phenanthrene	ND	10	UGL	R	
								85-68-7	Butylbenzyl phthalate	ND	10	UGL	R	
								86-30-6	N-Nitrosodiphenylamine	ND	10	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

24-OCT-94

15:23:00

Final Documentation Appendix Report
 Installation :Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	W2-18	W2-18	49.0	13-FEB-92	PC 49166		UM06/	86-73-7	Fluorene / 9H-Fluorene	ND	10	UGL	R	
								87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	ND	10	UGL	R	
								87-86-5	Pentachlorophenol	ND	50	UGL	R	
								88-06-2	2,4,6-Trichlorophenol	ND	10	UGL	R	
								88-74-4	2-Nitroaniline	ND	50	UGL	R	
								88-75-5	2-Nitrophenol	ND	10	UGL	R	
								91-20-3	Naphthalene / Tar camphor	ND	10	UGL	R	
								91-57-6	2-Methylnaphthalene	ND	10	UGL	R	
								91-58-7	2-Chloronaphthalene	ND	10	UGL	R	
								91-94-1	3,3'-Dichlorobenzidine	ND	10	UGL	R	
								95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	ND	20	UGL	R	
								95-50-1	1,2-Dichlorobenzene	ND	10	UGL	R	
								95-57-8	2-Chlorophenol	ND	10	UGL	R	
								95-95-4	2,4,5-Trichlorophenol	ND	50	UGL	R	
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	ND	10	UGL	R	
								99-09-2	3-Nitroaniline	ND	50	UGL	R	
									4-Bromophenyl phenyl ether	ND	10	UGL	R	
									4-Chlorophenyl phenyl ether	ND	10	UGL	R	
									Unknown compound 539	ND	30	UGL	S	
									Unknown compound 544	ND	200	UGL	S	
							UW35/	118-96-7	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene	LT	.319	UGL		
								121-14-2	2,4-Dinitrotoluene	LT	.321	UGL		
								121-82-4	RDX / Cyclonite / Hexahydro-1,3,5-trinitro-1,3,5-triazine *	LT	.653	UGL		
								2691-41-0	Cyclotetramethylenetetranitramine	LT	2.29	UGL		
								479-45-8	Tetryl / N-Methyl-N,2,4,6-tetranitroaniline / Nitramine / *	LT	1.29	UGL		
								55-63-0	Nitroglycerine / 1,2,3-Propanetriol trinitrate	LT	3.2	UGL		
								606-20-2	2,6-Dinitrotoluene	LT	.64	UGL		
								78-11-5	PETN / Pentaerythritol tetranitrate / 2,2-Bis[(nitrooxy)me]*	LT	5.02	UGL		
								88-72-2	2-Nitrotoluene	LT	.646	UGL		
								99-08-1	3-Nitrotoluene	LT	.492	UGL		
								99-35-4	1,3,5-Trinitrobenzene	LT	.517	UGL		
								99-65-0	1,3-Dinitrobenzene	LT	.319	UGL		
								99-99-0	4-Nitrotoluene	LT	.338	UGL		
								1024-57-3	Heptachlor epoxide	LT	6.00 E -3	UGL		
								1031-07-8	Endosulfan sulfate	LT	2.00 E -2	UGL		
								1104-28-2	PCB 1221	ND	.2	UGL	R	
								11096-82-5	PCB 1260	ND	.1	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab No.	Lab Anly.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Units
WELL	W2-18	MW2-18	49.0	14-FEB-92	PC	50822		99 /	11097-69-1	PCB 1254	ND	.1	UGL	R	
									11141-16-5	PCB 1232	ND	.1	UGL	R	
									12672-29-6	PCB 1248	ND	.1	UGL	R	
									12674-11-2	PCB 1016	ND	.1	UGL	R	
									309-00-2	Aldrin	LT	6.38 E -2	UGL		
									319-84-6	alpha-Hexachlorocyclohexane / alpha-Benzene hexachloride	LT	4.34 E -2	UGL		
									319-85-7	beta-Hexachlorocyclohexane / beta-Benzene hexachloride	LT	1.09 E -2	UGL		
									319-86-8	delta-Hexachlorocyclohexane / delta-Benzene hexachloride	LT	4.88 E -2	UGL		
									33213-65-9	Endosulfan II / beta-Endosulfan	LT	1.20 E -2	UGL		
									50-29-3	2,2-Bis(p-chlorophenyl)-1,1-trichloroethane	LT	3.16 E -2	UGL		
									5103-71-9	alpha-Chlordane	LT	2.02 E -2	UGL		
									53469-21-9	PCB 1242	ND	.1	UGL	R	
									53494-70-5	Endrin ketone	LT	2.82 E -2	UGL		
									5566-34-7	gamma-Chlordane	LT	4.50 E -2	UGL		
									58-89-9	Lindane / gamma-Benzene hexachloride / gamma-Hexachlorocyclopentadiene	LT	4.29 E -2	UGL		
									60-57-1	Dieldrin	LT	3.21 E -2	UGL		
									72-20-8	Endrin	LT	3.72 E -2	UGL		
									72-43-5	Methoxychlor / Methoxy-DDT / 1,1'-bis(2,2,2-trichloroethylidene)-2,2-bis(4-chlorophenyl)ethane / Rhoth*	LT	.267	UGL		
									72-54-8	2,2-Bis(p-chlorophenyl)-1,1-dichloroethene	LT	8.48 E -2	UGL		
									72-55-9	Endrin aldehyde	LT	9.46 E -2	UGL		
									7421-93-4	Heptachlor / 1H-1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-2H-pyran-2-one	LT	6.97 E -2	UGL		
									76-44-8	Heptachlor / Chlorinated camphene / Camphchlor / Alltox / *	LT	6.31 E -2	UGL		
									8001-35-2	Endosulfan I / alpha-Endosulfan	ND	.5	UGL	R	
									959-98-8	Mercury	LT	8.56 E -3	UGL		
									7439-97-6	Lead	LT	.74	UGL		
									7439-92-1	Thallium	LT	100	UGL		
									7440-28-0	Arsenic	LT	2.5	UGL		
									7440-38-2	Selenium	LT	6.01	UGL		
									7782-49-2	Aluminum	LT	14.9	UGL		
									7429-90-5	Iron	LT	18000	UGL		
									7439-89-6	Lead	UGL	99000	UGL		
									7439-92-1	Magnesium	UGL	137	UGL		
									7439-95-4	Manganese	UGL	3480	UGL		
									7439-96-5		UGL	2800	UGL		

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24-OCT-94

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Final Documentation Appendix Report
 Installation : Anniston AD, AL (AN)
 File Type: CGW 24-OCT-94
 Sampling Date Range: 01-JAN-91 24-OCT-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Outlets
WELL	W2-18	MW2-18	49.0	14-FEB-92	50822	PC	SS15/	7439-98-7	Molybdenum	LT	30.9	UGL		
								7440-02-0	Nickel		128	UGL		
								7440-09-7	Potassium		3780	UGL		
								7440-22-4	Silver	LT	12.5	UGL		
								7440-23-5	Sodium		841	UGL		
								7440-28-0	Thallium	LT	100	UGL		
								7440-36-0	Antimony	LT	37.1	UGL		
								7440-39-3	Barium		157	UGL		
								7440-41-7	Beryllium		3.22	UGL		
								7440-43-9	Cadmium	LT	5	UGL		
								7440-47-3	Chromium		60	UGL		
								7440-48-4	Cobalt		433	UGL		
								7440-50-8	Copper		109	UGL		
								7440-62-2	Vanadium		102	UGL		
								7440-66-6	Zinc		796	UGL		
								7440-70-2	Calcium		8860	UGL		
								7782-49-2	Selenium	LT	75	UGL		
								57-12-5	Cyanide	LT	8.17	UGL		

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** End of Report - 2328 Records Found **

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